

PSI, Villigen  
March-16, 2012

**MINUTES "BESCHLUSSKONFERENZ"  
OF THE USERS MEETING BV 44 AT PSI  
January 14 - 16, 2013**

present: Dr. K. Clausen (Chairman)  
Dr. A. Amato  
Prof. K. Kirch  
Dr. C. Petitjean (Secretary)  
Prof.. L. Rivkin  
Dr. M. Seidel  
Dr. A. Signer

excused: Prof. J. Mesot  
Prof. C. Bernhard  
Prof. R. Horisberger  
Prof. C. Hoffman  
Prof. E. Morenzoni  
Dr. Th. Straessle

# 1. Approval of Experiments

The recommendations of the BVR research committee and the  $\mu$ SR research committee are acknowledged (see minutes and lists in the appendix).

## New Proposals

- R-12-01.2      Studying the Proton “Radius” Puzzle with  $\mu p$  Elastic Scattering  
R. Gilman, et al.  
Rutgers University, New Brunswick NJ, Argonne IL, Newport News VA, South Carolina SC, Philadelphia PA, MIT, JLAB, Hampton VA, Charlottesville VA, Durham NC, Williamsburg VA, Norfolk VA (all USA), PSI, Tel Aviv, Jerusalem (Israel), Darmstadt (Germany), Nova Scotia (Canada).  
Approved. test runs 2013/14, main runs 2015/16 in  $\pi M1$  area. Special conditions (TDR’s, etc.), see committee minutes
- R-12-03.1      Search for the Decay  $\mu \rightarrow eee$   
A. Schöning, S. Ritt, et al.  
Univ. Heidelberg, PSI, Univ. Genève, Univ. Zürich, ETH Zürich.  
Approved in stages, test runs 2013 in  $\pi E5$  and  $\pi M1$  (2 weeks each). Special conditions (regular TDR reviews, etc.) see committee minutes
- R-13-01.1      PiHe: Laser Spectroscopy of pionic helium atoms  
M. Hori  
MPI Garching and U. Tokyo, CERN, WT Budapest.  
Approved 2 weeks test in  $\pi E5$ , further allocations in  $\pi E1$  or  $\pi E5$  will depend on availability. See committee minutes
- R-13-03.3      Study of Muon Capture for Muon to Electron Conversion Experiments  
P. Kammel, Y. Kuno, et al.  
U. Washington, Seattle (USA), U. Osaka (Japan), ANL IL, BU Boston MA, FNAL, U. Houston Texas, NM Amherst MA, PNNL Rickland WA, IC London, UCL London.  
Approved, 4 weeks in  $\pi E1-2$  area (+ 4 in 2014 depending on availability)
- 20121434      Exploring magnetic anomalies in the strongly coupled antiferromagnetic chain material CsCoO<sub>2</sub>  
Tom Lancaster, Univ. of Durham  
Approved, 1 days GPS
- 20121449      Magnetic order in the low doping regime in  $La_{2-x}Sr_xCoO_4$   
Tom Lancaster, Univ. of Durham  
Approved, 2 days GPS
- 20121482      Determination of spin structure in the partially-ordered state of quantum spin system NH<sub>4</sub>CuCl<sub>3</sub>  
Takayuki Goto, Sophia Univ.  
Approved, 2 days Dolly

- 20121533 Probing time reversal symmetry breaking in non-centrosymmetric  $\text{Mo}_3\text{Al}_2\text{C}$   
Ernst Bauer, Technische Univ. Wien  
Approved, 3 days Dolly
- 20121623 A survey of skyrmions  
Tom Lancaster, Univ. of Durham  
Refused, 0 days GPS
- 20121624 Anomalies of microwave surface resistance in superconducting niobium cavities  
Alexander Romanenko, Fermilab  
Refused, 0 days LEM
- 20121625 Quantum phase transition in electron-doped LCCO superconducting films.  
Hassan Saadaoui, Paul Scherrer Institut  
Refused, 0 days LEM
- 20121627 Microscopic Magnetic Properties of Novel Olivine-Type Battery Materials  
Martin Mansson, EPF Lausanne  
Approved, 3 days Dolly
- 20121629  $\mu\text{SR}$  Investigation of recently discovered Cobalt Oxyfluoride compounds  
Martin Mansson, EPF Lausanne  
Approved, 1 days GPS
- 20121631 Preliminary investigation towards a muonium probe of surface magnetism  
Elvezio Morenzoni, Paul Scherrer Institut  
Approved, 3 days LEM
- 20121643 Defect-magnetism in Cerium dioxide nanopowder  
Karl Ackland, Trinity College Dublin  
Approved, 2 days GPS
- 20121645 Muonium in cubic stabilized zirconia  
Rui C Vilao, Univ. of Coimbra  
Approved, 2 days GPS
- 20121646 Origin of superconductivity in charge compensated pnictides (Ba/K)\_1 (Fe/T)\_2 (As/P)\_2 [T=transition metal]  
Til Goltz, Technische Univ. Dresden  
Approved, 3 days Dolly
- 20121648 Disorder induced spin gap in Heisenberg AF-spin-1/2 chain  
Gediminas Simutis, ETH Zuerich  
Approved, 2 days LTF
- 20121649  $\mu\text{SR}$  study of fluctuating magnetism on single crystals of the pyrochlore oxide  $\text{Cd}_2\text{Os}_2\text{O}_7$   
Akihiro Koda, High Energy Acc. Research Org. (KEK)  
Approved, 2 days GPS

- 20121650 Symmetry of the superconducting order parameter in the new Bi-based compounds  
Toni Shiroka, ETH Zuerich  
Refused, 0 days LTF
- 20121653 Study of superconductivity of the  
(Cu<sub>0.75</sub>Mo<sub>0.25</sub>)Sr<sub>2</sub>(Ce,Y)<sub>s</sub>Cu<sub>2</sub>O<sub>5+2s+delta</sub> series  
Elvezio Morenzoni, Paul Scherrer Institut  
Approved, 3 days Dolly
- 20121658 Proximity effects in topological insulator/superconductor heterostructures  
Zaher Salman, Paul Scherrer Institut  
Approved, 2 days LEM
- 20121659 Internal fields in the Dzyaloshinskii-Moriya helimagnet Ba<sub>2</sub>CuGe<sub>2</sub>O<sub>7</sub>  
Roberto De Renzi, Univ. Parma  
Approved, 2 days GPS
- 20121660 A muSR study of a doped molecular spin chain  
Fan Xiao, Univ. of Durham  
Approved, 3 days LTF
- 20121667 Au impurity effect on the superconducting state of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub>  
Evelyn Stilp, Univ. Zuerich  
Refused, 0 days LEM
- 20121669 Internal fields in the Dzyaloshinskii-Moriya helimagnet Ba<sub>2</sub>CuGe<sub>2</sub>O<sub>7</sub>  
Roberto De Renzi, Univ. Parma  
Approved, 2 days LTF
- 20121670 Spontaneous spin disorder in frustrated and magnetoelectric LiCoPO<sub>4</sub>  
Rasmus Toft-Petersen, Helmholtz Zentrum Berlin fuer Materialien und Energie  
Refused, 0 days GPS
- 20121671 Interplay between magnetism and superconductivity in the Sr/O co-doped high temperature superconductor LScO<sub>1-x</sub>O close to quantum criticality  
Linda Udby, Copenhagen Univ.  
Refused, 0 days GPS
- 20121672 Disorder induced spin gap in Heisenberg AF-spin-1/2 chain  
Gediminas Simutis, ETH Zuerich  
Approved, 1 days GPS
- 20121673 Testing the new procedure for making Double wall Piston-Cylinder type of pressure cells  
Rustem Khasanov, Paul Scherrer Institut  
Refused, 0 days GPD
- 20121674 Testing the new procedure for making Double wall Piston-Cylinder type of pressure cells

- Rustem Khasanov, Paul Scherrer Institut  
Refused, 0 days Dolly
- 20121675 Symmetry of the superconducting order parameter in the new Bi-based compounds  
Toni Shiroka, ETH Zuerich  
Approved, 2 days GPS
- 20121676 Magnetization Dynamics of Surface-Deposited Single-Ion Molecular Magnets  
Jan Dreiser, Paul Scherrer Institut  
Approved, 3 days LEM
- 20121677 Muon frequency shift investigation of the ground state of magnetically frustrated Tb<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub>  
Alain Yaouanc, CEA, Grenoble  
Approved, 3 days LTF
- 20121678 MuSR investigation of the anisotropic magnetic properties of La<sub>8</sub>Cu<sub>7</sub>O<sub>19</sub> single crystals  
Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung Dresden  
Refused, 0 days GPS
- 20121680 muSR study of Sr<sub>2</sub>CuWO<sub>6</sub> and Sr<sub>2</sub>CuMoO<sub>6</sub>  
Maarit Karppinen, Aalto Univ. School of Chemical Technology  
Approved, 2 days GPS
- 20121681 Induced magnetisation in nanocarbon  
Oscar Cespedes, Univ. of Leeds  
Approved, 4 days LEM
- 20121682 Probing the magnetic properties of Eu-doped GaN using low-energy muon spin rotation  
Vyacheslav Kachkanov, Diamond Light Source Ltd  
Approved, 3 days LEM
- 20121683 Pressure-induced quantum phase transitions in gapped quantum magnets  
David Jan Schmidiger, ETH Zuerich  
Approved, 6 days GPD
- 20121683 Pressure-induced quantum phase transitions in gapped quantum magnets  
David Jan Schmidiger, ETH Zuerich  
Approved, 1 days Dolly
- 20121686 Long range magnetic order in random singlet spin chains  
  
Matthias Carsten Thede, Paul Scherrer Institut  
Approved, 2 days Dolly
- 20121688 Nature of a mixed AFM/fM intermediate phase in the layered quasi-2D spin system Cu<sub>3</sub>Bi(SeO<sub>3</sub>)<sub>2</sub>O<sub>2</sub>Br

- Andrej Zorko, Jozef Stefan Inst.  
Refused, 0 days LTF
- 20121689 Magnetic and Superconducting Groundstate of Disorder-Free delta-doped LScO Superlattices  
Andreas Suter, Paul Scherrer Institut  
Approved, 4 days LEM
- 20121690 Moving deeper into the spin liquid phase of the kappa-ET system: muSR of deuterated ET\_2Cu\_2(CN)\_3  
Francis L Pratt, Rutherford Appleton Lab.  
Approved, 4 days LTF
- 20121691 muSR Study of the Magnetic Penetration Depth in the Multi-Layer Bi-2223 High-Tc Superconductors  
Tadashi Adachi, Univ. Tohoku  
Refused, 0 days GPS
- 20121695 Measurement of the Magnetic Properties of Single Molecule Magnets Thin Films and Monolayers  
Zaher Salman, Paul Scherrer Institut  
Refused, 0 days GPS
- 20121696 Study of superconductivity and magnetism in alkali-metal-doped phenanthrene  
Laura Nuccio, Univ. Fribourg  
Approved, 3 days GPS
- 20121697 uSR studies of novel doped magnetic semiconductors  
Fanlong Ning, Zhejiang Univ.  
Refused, 0 days GPS
- 20121698 The study of rare earth and cobalt codoped diluted magnetic semiconductors  
Jiabao Yi, University of New South Wales  
Refused, 0 days LEM
- 20121699 muSR Study of the Magnetic Penetration Depth in the Multi-Layer Bi-2223 High-Tc Superconductors  
Tadashi Adachi, Univ. Tohoku  
Refused, 0 days Dolly
- 20121700 Behaviour of muonim in single-crystal CVD diamond  
Tair Mamedov, Joint Inst. for Nuclear Research  
Refused, 0 days Dolly
- 20121701 Depth-Resolved Measurements of Dynamics in Polymer Thin Films using Spin-Polarized Radioactive Probes  
Iain D McKenzie, TRIUMF  
Approved, 5 days LEM

- 20121702      Suppression of Magnetic Order in Iridium Oxides  
Michael J Graf, Boston College  
Approved, 2 days GPS
- 20121703      Effects of the presence of a superconducting layer in an organic spin valve  
Laura Nuccio, Univ. Fribourg  
Approved, 4 days LEM
- 20121704      Suppression of Magnetic Order in Iridium Oxides  
Michael J Graf, Boston College  
Approved, 2 days LTF
- 20121707      MuSR investigation of magnetic and non-magnetic impurities on the  
magnetic ground state of SrCuO<sub>2</sub> zig-zag spin chains  
Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung  
Dresden  
Approved, 3 days GPS
- 20121708      Low Energy muSR of cuprate thin-films: origin of the surface magnetism and  
superconductivity of T' structure  
Ryosuke Kadono, High Energy Acc. Research Org. (KEK)  
Approved, 3 days LEM
- 20121709      Co-diluted CeFeAsO: an interesting midpoint between the typical phase  
diagrams of 122 and F-doped 1111 pnictide materials  
Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung  
Dresden  
Approved, 2 days GPS
- 20121710      Muon Knight shift in ferromagnetic superconductor UCoGe  
Lei Shu, Fudan Univ.  
Refused, 0 days LTF
- 20121711      Spin dynamics of 4f-localized ferromagnet CeRu<sub>2</sub>X<sub>2</sub>C (X=Al,Ga;X=B,C)  
Kwang-Yong Choi, Chung-Ang University  
Approved, 3 days Dolly
- 20121713      Low moment ferromagnetism in CeCo<sub>3</sub>B<sub>2</sub>  
Daniel Andreica, Babes-Bolyai Univ.  
Approved, 1 days Dolly
- 20121715      Pressure dependent magnetic phase transitions in disordered  
antiferromagnet PbFe<sub>1/2</sub>Nb<sub>1/2</sub>O<sub>3</sub>  
Shravani Chillal, ETH Zuerich  
Approved, 6 days GPD
- 20121715      Pressure dependent magnetic phase transitions in disordered  
antiferromagnet PbFe<sub>1/2</sub>Nb<sub>1/2</sub>O<sub>4</sub>  
Shravani Chillal, ETH Zuerich  
Approved, 1 days Dolly

- 20121717 Magnetic order and Spin dynamics in the strongly correlated heavy-fermion system  $\text{Yb}[\text{Rh}(1-x)\text{Co}(x)]_2\text{Si}_2$   
Johannes Spehling, Technische Univ. Dresden  
Approved, 4 days LTF
- 20121719 Nature of a mixed AFM/fM intermediate phase in the layered quasi-2D spin system  $\text{Cu}_3\text{Bi}(\text{SeO}_3)_2\text{O}_2\text{Br}$   
Andrej Zorko, Jozef Stefan Inst.  
Refused, 0 days GPS
- 20121720 Magnetism in multiferroic  $\text{PbFe}_{2/3}\text{W}_{1/3}\text{O}_3$   
Shravani Chillal, ETH Zuerich  
Approved, 2 days GPS
- 20121721 Comparison of Cr<sub>7</sub>Ni-based molecular nanomagnets entangled and non-entangled by a MuSR study.  
Paolo Arosio, Univ. degli Studi di Milano  
Refused, 0 days GPS
- 20121722 Low-energy and bulk MuSR studies of Skyrmions in MnSi, FeGe and  $\text{Cu}_2\text{OSeO}_3$ : continuation request  
Yasutomo J Uemura, Columbia Univ.  
Approved, 2 days GPS
- 20121723 Magnetic order in  $\text{CePt}_{3\text{B}}(1-x)\text{Si}_x$   
Daniela Rauch, Techn. Univ. Braunschweig  
Approved, 3 days LTF
- 20121726 Search for a magnetic transition in the magnetically frustrated pyrochlore  $\text{Er}_2\text{Sn}_2\text{O}_7$   
Pierre Dalmas de Reotier, CEA, Grenoble  
Approved, 2 days LTF
- 20121727 Comparison of Cr<sub>7</sub>Ni-based molecular nanomagnets entangled and non-entangled by a MuSR study.  
Paolo Arosio, Univ. degli Studi di Milano  
Refused, 0 days LTF
- 20121728 A local probe study of the magnetic ground state of  $\text{NbFe}_2$ .  
Sean R Giblin, Univ. of Cardiff  
Approved, 2 days Dolly
- 20121729 Magnetic order in  $\text{CePt}_{3\text{B}}(1-x)\text{Si}_x$   
Daniela Rauch, Techn. Univ. Braunschweig  
Approved, 3 days GPS
- 20121730 d<sub>0</sub>-magnetism in  $\text{BaB}_6$  and  $\text{SrB}_6$   
Andreas Suter, Paul Scherrer Institut  
Approved, 4 days LEM



- 20121731 Static and dynamic behavior of field induced staggered moment in the quadrupole ordering phase of PrIr<sub>2</sub>Zn<sub>20</sub> and PrRh<sub>2</sub>Zn<sub>20</sub>  
Wataru Higemoto, Japan Atomic Energy Agency  
Approved, 2 days LTF
- 20121736 Ground States of 2D Triangular Antiferromagnets Ba<sub>3</sub>MTi<sub>2</sub>O<sub>9</sub> (M=Ir, Ru)  
Kwang-Yong Choi, Chung-Ang University  
Refused, 0 days LTF
- 20121738 Unusual Magnetism in the "Nonmagnetic" Black Phase of SmS  
Takashi U. Ito, Japan Atomic Energy Agency  
Refused, 0 days LTF
- 20121739  $\mu$ SR investigation of the skyrmion lattice in insulating Cu<sub>2</sub>OSeO<sub>3</sub>  
Krunoslav Prsa, EPF Lausanne  
Refused, 0 days GPS
- 20121740 Static and dynamic behavior of field induced staggered moment in the quadrupole ordering phase of PrIr<sub>2</sub>Zn<sub>20</sub> and PrRh<sub>2</sub>Zn<sub>20</sub>  
Wataru Higemoto, Japan Atomic Energy Agency  
Approved, 2 days GPS
- 20121743 Emergence of superconductivity in BaNi<sub>2</sub>(Ge<sub>1-x</sub>Px)<sub>2</sub> at a structural instability  
Fabian von Rohr, Univ. Zuerich  
Approved, 3 days LTF
- 20121744 Magnetic order and Spin dynamics in the strongly correlated heavy-fermion system Yb[Rh(1-x)Co(x)]<sub>2</sub>Si<sub>2</sub>  
Johannes Spehling, Technische Univ. Dresden  
Approved, 2 days GPS
- 20121745 Magnetic field driven quantum phase transition and unconventional magnetic ground states in frustrated pyrochlore oxides with effective S=1/2 spins  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 4 days LTF
- 20121746 Pressure effect on the magnetic and the structural properties of EuTiO<sub>3</sub>  
Zurab Guguchia, Univ. Zuerich  
Approved, 6 days GPD
- 20121749 Tuning the static spin-stripe phase in La<sub>1-2x</sub>Ba<sub>x</sub>CuO<sub>4</sub> by hydrostatic pressure  
Zurab Guguchia, Univ. Zuerich  
Approved, 1 days GPS
- 20121751 Magnetic Properties of Quasi Two-dimensional Triangular Antiferromagnet, EtMe<sub>3</sub>Sb[Pd(dmit)<sub>2</sub>]<sub>2</sub>.  
Yasuyuki Ishii, Tokyo Medical Univ.  
Approved, 2 days LTF

- 20121752 Study of geometrically frustrated magnets on a spinel lattice  
Alain Yaouanc, CEA, Grenoble  
Approved, 2 days GPS
- 20121753 Enhanced dynamics in the magnetically ordered state of HoCo<sub>2</sub>  
Jiri Prchal, Charles University  
Approved, 5 days GPD
- 20121754 A survey of skyrmions  
Tom Lancaster, Univ. of Durham  
Approved, 3 days LEM
- 20121756 An investigation of the superconducting ground state in the BiS<sub>2</sub>-type layered superconductor Bi<sub>4</sub>O<sub>4</sub>S<sub>3</sub>  
Pabitra Kumar Biswas, Paul Scherrer Institut  
Approved, 3 days LTF
- 20121757 Determination of hole capture rates of negative muonium in germanium  
Thomas Prokscha, Paul Scherrer Institut  
Approved, 4 days LEM
- 20121758 Interactions between superconductivity and antiferromagnetism in CeCo(In<sub>1-x</sub>Cd<sub>x</sub>)<sub>5</sub>  
Ludovic Howald, Univ. Zuerich  
Approved, 2 days GPS
- 20121759 Interplay of Static Disorder and Magnetic Order in a New S=1/2 Random Singlet Chain Compound  
Manuel Haelg, ETH Zuerich  
Refused, 0 days LTF
- 20121760 Emergence of superconductivity in BaNi<sub>2</sub>(Ge<sub>1-x</sub>P<sub>x</sub>)<sub>2</sub> at a structural instability  
Fabian von Rohr, Univ. Zuerich  
Approved, 2 days GPS
- 20121761 Interplay between magnetism and the Austenite-Martensite transition in Ni<sub>2</sub>MnGa Cr-capped thin films  
Joshua A Lim, Univ. of Birmingham  
Approved, 3 days LEM
- 20121762 Magnetic ordering and spin dynamics in the quasi-one-dimensional spin-chain oxide Ca<sub>3</sub>Co<sub>2</sub>O<sub>6</sub>  
  
Vivek K. Malik, Indian Institute of Technology Patna  
Refused, 0 days GPS
- 20121763 Out-of-plane magnetic field profile in type-I and type-II superconducting films in a transverse magnetic field.  
Vladimir Kozhevnikov, Tulsa Community College  
Approved, 4 days LEM

- 20121764 Effect of pressure on FeSeTe  
Markus M. Bendele, Univ. di Roma La Sapienza  
Approved, 7 days GPD
- 20121765 Spin Frustration in Iridate Systems, and the Role of the Spin-Orbit Coupling.  
Paul G Freeman, EPF Lausanne  
Refused, 0 days GPS
- 20121768 Superconducting properties of CaSrAlSi  
Markus M. Bendele, Univ. di Roma La Sapienza  
Approved, 2 days Dolly
- 20121769 Superconducting properties of CaSrAlSi  
Markus M. Bendele, Univ. di Roma La Sapienza  
Approved, 7 days GPD
- 20121771 Superconductivity in Ca<sub>3</sub>Ir<sub>4</sub>Sn<sub>13</sub> and Sr<sub>3</sub>Ir<sub>4</sub>Sn<sub>13</sub> and its possible interplay  
with FM fluctuations and charge ordering.  
Pabitra Kumar Biswas, Paul Scherrer Institut  
Approved, 3 days Dolly
- 20121772 The electronic phase diagram of Co-doped LaFe(1-x)Co(x)AsO  
Hemke Maeter, Technische Univ. Dresden  
Approved, 4 days Dolly
- 20121773 New iron-based superconductors containing molecular intercalates  
Stephen J Blundell, Univ. of Oxford  
Approved, 3 days GPS
- 20121776 Effects of external pressure on the superconducting properties of optimally F-  
doped LaFeAsO: critical temperature and superfluid density  
Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung  
Dresden  
Approved, 6 days GPD
- 20121777 Pressure effect on the phase separation and magnetic penetration depth of  
anion site substituted 122-iron chalcogenides: A<sub>x</sub>Fe<sub>2</sub>-ySe<sub>2</sub>-zX<sub>z</sub> (A=K or Rb;  
X= S or Te) probed by muSR technique  
Anna Krzton-Maziopa, Warsaw Univ. of Technology  
Refused, 0 days GPD
- 20121778 Magnetic Ordering of two frustarted low-dimensional V<sup>3+</sup> halides  
Reinhard K Kremer, Max Planck Institute for Solid State Research  
Approved, 2 days GPS
- 20121780 Long range magnetic ordering and spin dynamics in the itinerant magnets  
V<sub>1-x</sub>Cr<sub>x</sub>PtGe (x=0, 0.1, 0.2)  
Helge Rosner, Max-Planck-Inst. fuer Chemische Physik fester Stoffe  
Approved, 2 days Dolly

- 20121781 A copper-based molecular magnet with a high transition temperature  
Stephen J Blundell, Univ. of Oxford  
Approved, 1 days GPS
- 20121782 Effects of external pressure on the superconducting properties of optimally F-doped LaFeAsO: critical temperature and superfluid density  
Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung  
Dresden  
Approved, 1 days Dolly
- 20121783 Ground State of the New  $S=1/2$  Kagome Compound, Sr-Vesignieite  
Philippe Mendels, Univ. Paris XI  
Approved, 2 days GPS
- 20121784 Bose Glass and Bose Einstein Condensation in a Quantum Magnet  
Erik Wulf, ETH Zuerich  
Approved, 2 days LTF
- 20121785 Phase diagram and superconductivity in the proximity of magnetic order in  $(\text{Ca}_{1-x}\text{La}_x)_{10}(\text{FeAs})_{10}\text{Pt}_3\text{As}_8$   
Dirk Johrendt, Ludwig-Maximilian Univ. Muenchen LMU  
Approved, 3 days Dolly
- 20121788 Magnetic field driven quantum phase transition and unconventional magnetic ground states in frustrated pyrochlore oxides with effective  $S=1/2$  spins  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 1 days GPS
- 20121789 Orbital Order and Complex Magnetism in the layered Transition Metal Oxychalcogenides  $\text{La}_2\text{O}_2\text{T}_2\text{OSe}_2$  ( $T=\text{Fe,Co,Mn}$ )  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 2 days Dolly
- 20121791 Evolution of the two superconducting gaps in  $\text{Lu}_2\text{Fe}_3\text{Si}_5$  under hydrostatic pressure  
Pabitra Kumar Biswas, Paul Scherrer Institut  
Approved, 6 days GPD
- 20121792 Interplay of Static Disorder and Magnetic Order in a New  $S=1/2$  Random Singlet Chain Compound  
Manuel Haelg, ETH Zuerich  
Refused, 0 days GPS
- 20121793 Determination of hole capture rates of negative muonium in germanium  
Thomas Prokscha, Paul Scherrer Institut  
Approved, 2 days Dolly
- 20121794 Study of the Cooper pair diffraction effect on vortex lattice in highly pure Nb  
Alexander Maisuradze, Paul Scherrer Institut  
Approved, 2 days Dolly

- 20121795 muSR investigation of new superconducting derivatives of Pr<sub>3</sub>Rh<sub>4</sub>Sn<sub>13</sub> type  
Alexander Maisuradze, Paul Scherrer Institut  
Refused, 0 days GPS
- 20121796 muSR investigation of new superconducting derivatives of Pr<sub>3</sub>Rh<sub>4</sub>Sn<sub>13</sub> type  
Alexander Maisuradze, Paul Scherrer Institut  
Refused, 0 days LTF
- 20121797 Magnetic order and spin dynamics of the frustrated one-dimensional quantum magnet LiCuSbO<sub>4</sub>  
Hemke Maeter, Technische Univ. Dresden  
Refused, 0 days LTF
- 20121798 Magnetic order and spin dynamics of the frustrated one-dimensional quantum magnet LiCuSbO<sub>4</sub>  
Hemke Maeter, Technische Univ. Dresden  
Refused, 0 days GPS
- 20121800 Superconductivity and Magnetism in a new Titanium-Based Oxypnictide Superconductor: Ba<sub>1-x</sub>Na<sub>x</sub>Ti<sub>2</sub>Sb<sub>2</sub>O  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 3 days GPS
- 20121803 Superconductivity in Ca<sub>3</sub>Ir<sub>4</sub>Sn<sub>13</sub> and Sr<sub>3</sub>Ir<sub>4</sub>Sn<sub>13</sub> and its possible interplay with FM fluctuations and charge ordering.  
Pabitra Kumar Biswas, Paul Scherrer Institut  
Approved, 7 days GPD
- 20121804 Appearance of a New Magnetic Phases and Competition of Magnetism and Superconductivity in Ba<sub>1-x</sub>(K,Na)<sub>x</sub>Fe<sub>2</sub>As<sub>2</sub> as a Function of Pressure  
Dirk Johrendt, Ludwig-Maximilian Univ. Muenchen LMU  
Approved, 2 days GPS
- 20121805 muSR Investigation of recently discovered Cobalt Oxyfluoride compounds  
Martin Mansson, EPF Lausanne  
Approved, 2 days Dolly

## **New upgrade Proposal**

- R-99-05.2 Search for  $\mu^+ \rightarrow e^+\gamma$   
T. Mori, A. Baldini et al.  
U. Tokyo (Japan), INFN Pisa, INFN Genua, INFN Pavia, INFN Lecce, INFN Roma, Budker INP Novosibirsk, KEK (Japan), PSI, U. Irvine, JINR Dubna.  
Approved, 2 W test in  $\pi E5$ , further beam allocations subject o regular TDR reviews, see committee minutes

## Letter of Intent

R-13-02.0      Search for the Muonium Decay  $\mu^+ e^+ \rightarrow \nu_\mu \nu_e$   
INR Moscow, JINR Dubna, CBU Lyon, ETHZ.  
Submission of a full proposal is expected, including answers to questions raised by the committee minutes

## 2. Beam schedules

The 590 MeV ring accelerator is scheduled for 32 weeks of high intensity beam production from May 13 to December 23, 2013 (see beam operations schedule 2013 on <http://abe.web.psi.ch/schedule/betriebsprogramm2013.pdf> and research schedule in the appendix). On the weekend 24./25 August 2013, the piE1 area is reserved for muSR beam demonstration with Dolly to participants of the Zuoz summer school.

As usual, the beam schedules 2013 will be regularly updated and are displayed on the internet:

- [http://www.psi.ch/ltp/FacilitiesEN/schedule\\_2013.pdf](http://www.psi.ch/ltp/FacilitiesEN/schedule_2013.pdf) for the general schedule
- <http://lmu.web.psi.ch/facilities/schedules.html> for  $\mu$ SR details

## 3. Varia

The next meeting **BV45** is scheduled for **January 27 - 29, 2014**. The first day is reserved for reviews of MEG, Mu3e and nEDM experiments. The **deadline** for beam requests, new proposals and addenda is **January 6, 2014**. Users are requested to make electronic submissions of their documents (pdf files).

The dates for the next meeting BVRA-2014 are not fixed yet.

## Attachments

- PSI 590 MeV Program May 13 – December 23, 2013
- BV44 list of PSI HE experiments
- BVRA-2013 list of PSI  $\mu$ SR experiments
- the short minutes with recommendations of the scientific committee for particle physics experiments can be found on <http://www.psi.ch/ltp/previous-users-meetings>

# PSI 590 MeV Program May – December 2013

Number of week 2013				20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51						
Cycle dates				13.05 - 10.06				13.06 - 08.07				11.07 - 05.08				08.08 - 02.09				05.09 - 30.09				03-10 - 28.10				01.11 - 25.11				28.11 - 23.12									
Area	proposal	spokesman	PSP	approved schedule 2013																																					
PIM1		Deiters	5201.32000.002	Tests																																					
		Grab,Schoening		ETH/U-HeidelbgPraktikum																																					
	R-12-01	Gilman		MUSE																																					
	R-12-03	Schoening		mu->eee																																					
		Petrascu		Tests Kaonic (Frascati)																																					
PIM3	RA-Progr.	Amato (coord)	5201.35700.003	MuSR (GPS&LTF)																																					
PIE1	R-07-05	Kammel,Petitjean	5201.32000.005	MuSun																																					
	R-13-03	Kammel,Kuno		AlCap																																					
	Ra-Progr.	Amato (coord)	5203.35700.003	MuSr (Dolly)																																					
PIE3	RA-Progr.	Scheuermann Co	5203.35700.003	MuSR (Hochfeld)																																					
PIE5	R-99-05	Mori,Baldini	5203.32003.001	MEG																																					
	R-12-03	Schoening		mu->eee																																					
	R-10-01	Kottrmann, Pohl		Lamb-shift muHe																																					
	R-13-01	Hori		PiHe Laser-spectroscopy																																					
MuE1	RA-Progr.	Amato (coord)	5203.35700.003	MuSR (GPD)																																					
MuE4	RA-Progr.	Prokscha (coord)	5203.35700.009	LEM																																					
UCN	R-05-03	Kirch, Heil	5201.32002.001	nEDM																																					
Inj. 2 and Ring Cycles																																									

- beam time for particle physics
- beam time for MuSR
- not allocated
- beam time for tests
  
- HE beam
- service, machin development
- accelerator start-up / stop

**BV43 LIST OF PSI  $\pi/\mu$  EXPERIMENTS: BEAM REQUESTS AND ALLOCATIONS 2013**

				(1 Week ~ 6 beam days)			Request	Remarks	Allocation
				Used	Allocation	Ref.			
<b><math>\pi</math>M1</b>	Praktikum R-12-01	GRAB,SCHOENING	Praktikum ETH-Heidelberg		appr.		2 W	1.9. - 14.9.2013	2 W
		GILMAN	beamtests for MUSE	12 W	appr.	BV44	4 W	13.5. - 10.06.2013	4 W
		SCHOENING	$\mu \rightarrow eee$		appr.	BV44	2 W	16.9. - 30.9.2013	2 W
		PETRASCU	Tests of Frascati Team				2 W	11.7. - 22.7.2013	2 W
		DEITERS (coordinator)	various test experiments				22 W	allocations later	W
<b><math>\pi</math>M3</b>	RA-Program	AMATO (coordinator)	$\mu$ SR (GPS & LTF)		(see BVRA)		32 W		32 W
<b><math>\pi</math>E1</b>	RA-Program	AMATO (coordinator)	$\mu$ SR with DOLLY		(see BVRA)		14 W +1WE	13.5.-19.8.2013	14 W + 1WE
	R-08-01	KAMMEL,PETITJEAN	$\mu$ -d capture (MuSun)	33 W	appr.	BV39	12 W	5.9. - 25.11.2013	12 W
	R-13-03	KAMMEL, KUNO	Alcap		appr.	BV44	4 W	28.11.- 23.12.2013	4 W
<b><math>\pi</math>E3</b>	RA-Program	SCHEUERMANN (coord.)	high field $\mu$ SR		(see BVRA)		32 W		32 W
<b><math>\pi</math>E5</b>	R-99-05	MORI, BALDINI	$\mu \rightarrow e + \gamma$	255 W	appr.	BV29	16 W	13.5. - 2.9. 2013	16 W
	R-12-03	SCHOENING	$\mu \rightarrow eee$		appr.	BV44	2 W Test	5.9. - 16.9.2013	2 W Test
	R-10-01	KOTTMANN, POHL	$\mu$ He Helium		appr.	BV41	12 W	3.10. - 23.12.2013	12 W
	R-13-01	HORI	$\pi$ He Laser Spectroscopy		appr.	BV44	5 W Test	16.9. - 30.9.2013	2 W Test
<b><math>\mu</math>E1</b>	RA-Program	AMATO (coordinator)	$\mu$ SR (GPD)		(see BVRA)		32 W		32 W *
<b><math>\mu</math>E4</b>	slow $\mu^+$	PROKSCHA (coordinator)	LEM slow $\mu^+$ facility		(see BVRA)		32 W		32 W
<b>UCN</b>	R-05-03	KIRCH, HEIL	nEDM	34 W	appr.	BV36	32 W		32 W

\* last 11  $\mu$ SR weeks will be allocated in a second round



## BVRA-2013 list of PSI $\mu$ SR experiments

### New Proposals

20121434	Exploring magnetic anomalies in the strongly coupled antiferromagnetic chain material CsCoO <sub>2</sub> Tom Lancaster, Univ. of Durham Approved, 1 days GPS
20121449	Magnetic order in the low doping regime in La <sub>2-x</sub> Sr <sub>x</sub> CoO <sub>4</sub> Tom Lancaster, Univ. of Durham Approved, 2 days GPS
20121482	Determination of spin structure in the partially-ordered state of quantum spin system NH <sub>4</sub> CuCl <sub>3</sub> Takayuki Goto, Sophia Univ. Approved, 2 days Dolly
20121533	Probing time reversal symmetry breaking in non-centrosymmetric Mo <sub>3</sub> Al <sub>2</sub> C Ernst Bauer, Technische Univ. Wien Approved, 3 days Dolly
20121623	A survey of skyrmions Tom Lancaster, Univ. of Durham Refused, 0 days GPS
20121624	Anomalies of microwave surface resistance in superconducting niobium cavities Alexander Romanenko, Fermilab Refused, 0 days LEM
20121625	Quantum phase transition in electron-doped LCCO superconducting films. Hassan Saadaoui, Paul Scherrer Institut Refused, 0 days LEM
20121627	Microscopic Magnetic Properties of Novel Olivine-Type Battery Materials Martin Mansson, EPF Lausanne Approved, 3 days Dolly
20121629	$\mu$ SR Investigation of recently discovered Cobalt Oxyfluoride compounds Martin Mansson, EPF Lausanne Approved, 1 days GPS
20121631	Preliminary investigation towards a muonium probe of surface magnetism Elvezio Morenzoni, Paul Scherrer Institut Approved, 3 days LEM
20121643	Defect-magnetism in Cerium dioxide nanopowder Karl Ackland, Trinity College Dublin Approved, 2 days GPS
20121645	Muonium in cubic stabilized zirconia Rui C Vilao, Univ. of Coimbra Approved, 2 days GPS
20121646	Origin of superconductivity in charge compensated pnictides (Ba/K) <sub>1</sub> (Fe/T) <sub>2</sub> (As/P) <sub>2</sub> [T=transition metal] Til Goltz, Technische Univ. Dresden Approved, 3 days Dolly
20121648	Disorder induced spin gap in Heisenberg AF-spin-1/2 chain Gediminas Simutis, ETH Zuerich Approved, 2 days LTF

## BVRA-2013 list of PSI $\mu$ SR experiments

20121649	<p><math>\mu</math>SR study of fluctuating magnetism on single crystals of the pyrochlore oxide <math>\text{Cd}_2\text{Os}_2\text{O}_7</math>  Akihiro Koda, High Energy Acc. Research Org. (KEK)  Approved, 2 days GPS</p>
20121650	<p>Symmetry of the superconducting order parameter in the new Bi-based compounds  Toni Shiroka, ETH Zuerich  Refused, 0 days LTF</p>
20121653	<p>Study of superconductivity of the <math>(\text{Cu}_{0.75}\text{Mo}_{0.25})\text{Sr}_2(\text{Ce},\text{Y})\text{Cu}_2\text{O}_{5+2s+\delta}</math> series  Elvezio Morenzoni, Paul Scherrer Institut  Approved, 3 days Dolly</p>
20121658	<p>Proximity effects in topological insulator/superconductor heterostructures  Zaher Salman, Paul Scherrer Institut  Approved, 2 days LEM</p>
20121659	<p>Internal fields in the Dzyaloshinskii-Moriya helimagnet <math>\text{Ba}_2\text{CuGe}_2\text{O}_7</math>  Roberto De Renzi, Univ. Parma  Approved, 2 days GPS</p>
20121660	<p>A <math>\mu</math>SR study of a doped molecular spin chain  Fan Xiao, Univ. of Durham  Approved, 3 days LTF</p>
20121667	<p>Au impurity effect on the superconducting state of <math>\text{YBa}_2\text{Cu}_3\text{O}_{7-x}</math>  Evelyn Stilp, Univ. Zuerich  Refused, 0 days LEM</p>
20121669	<p>Internal fields in the Dzyaloshinskii-Moriya helimagnet <math>\text{Ba}_2\text{CuGe}_2\text{O}_7</math>  Roberto De Renzi, Univ. Parma  Approved, 2 days LTF</p>
20121670	<p>Spontaneous spin disorder in frustrated and magnetoelectric <math>\text{LiCoPO}_4</math>  Rasmus Toft-Petersen, Helmholtz Zentrum Berlin fuer Materialien und Energie  Refused, 0 days GPS</p>
20121671	<p>Interplay between magnetism and superconductivity in the Sr/O co-doped high temperature superconductor <math>\text{LScO}+\text{O}</math> close to quantum criticality  Linda Udby, Copenhagen Univ.  Refused, 0 days GPS</p>
20121672	<p>Disorder induced spin gap in Heisenberg AF-spin-1/2 chain  Gediminas Simutis, ETH Zuerich  Approved, 1 days GPS</p>
20121673	<p>Testing the new procedure for making Double wall Piston-Cylinder type of pressure cells  Rustem Khasanov, Paul Scherrer Institut  Refused, 0 days GPD</p>
20121674	<p>Testing the new procedure for making Double wall Piston-Cylinder type of pressure cells  Rustem Khasanov, Paul Scherrer Institut  Refused, 0 days Dolly</p>
20121675	<p>Symmetry of the superconducting order parameter in the new Bi-based compounds  Toni Shiroka, ETH Zuerich  Approved, 2 days GPS</p>
20121676	<p>Magnetization Dynamics of Surface-Deposited Single-Ion Molecular Magnets  Jan Dreiser, Paul Scherrer Institut  Approved, 3 days LEM</p>

## BVRA-2013 list of PSI $\mu$ SR experiments

20121677	Muon frequency shift investigation of the ground state of magnetically frustrated Tb <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> Alain Yaouanc, CEA, Grenoble Approved, 3 days LTF
20121678	MuSR investigation of the anisotropic magnetic properties of La <sub>8</sub> Cu <sub>7</sub> O <sub>19</sub> single crystals Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung Dresden Refused, 0 days GPS
20121680	muSR study of Sr <sub>2</sub> CuWO <sub>6</sub> and Sr <sub>2</sub> CuMoO <sub>6</sub> Maarit Karppinen, Aalto Univ. School of Chemical Technology Approved, 2 days GPS
20121681	Induced magnetisation in nanocarbon Oscar Cespedes, Univ. of Leeds Approved, 4 days LEM
20121682	Probing the magnetic properties of Eu-doped GaN using low-energy muon spin rotation Vyacheslav Kachkanov, Diamond Light Source Ltd Approved, 3 days LEM
20121683	Pressure-induced quantum phase transitions in gapped quantum magnets David Jan Schmidiger, ETH Zuerich Approved, 6 days GPD
20121683	Pressure-induced quantum phase transitions in gapped quantum magnets David Jan Schmidiger, ETH Zuerich Approved, 1 days Dolly
20121686	Long range magnetic order in random singlet spin chains Matthias Carsten Thede, Paul Scherrer Institut Approved, 2 days Dolly
20121688	Nature of a mixed AFM/fM intermediate phase in the layered quasi-2D spin system Cu <sub>3</sub> Bi(SeO <sub>3</sub> ) <sub>2</sub> O <sub>2</sub> Br Andrej Zorko, Jozef Stefan Inst. Refused, 0 days LTF
20121689	Magnetic and Superconducting Groundstate of Disorder-Free delta-doped LSCO Superlattices Andreas Suter, Paul Scherrer Institut Approved, 4 days LEM
20121690	Moving deeper into the spin liquid phase of the kappa-ET system: muSR of deuterated ET <sub>2</sub> Cu <sub>2</sub> (CN) <sub>3</sub> Francis L Pratt, Rutherford Appleton Lab. Approved, 4 days LTF
20121691	muSR Study of the Magnetic Penetration Depth in the Multi-Layer Bi-2223 High-Tc Superconductors Tadashi Adachi, Univ. Tohoku Refused, 0 days GPS
20121695	Measurement of the Magnetic Properties of Single Molecule Magnets Thin Films and Monolayers Zaher Salman, Paul Scherrer Institut Refused, 0 days GPS
20121696	Study of superconductivity and magnetism in alkali-metal-doped phenanthrene Laura Nuccio, Univ. Fribourg Approved, 3 days GPS
20121697	uSR studies of novel doped magnetic semiconductors Fanlong Ning, Zhejiang Univ. Refused, 0 days GPS

## BVRA-2013 list of PSI $\mu$ SR experiments

20121698	The study of rare earth and cobalt codoped diluted magnetic semiconductors Jiabao Yi, University of New South Wales Refused, 0 days LEM
20121699	muSR Study of the Magnetic Penetration Depth in the Multi-Layer Bi-2223 High-Tc Superconductors Tadashi Adachi, Univ. Tohoku Refused, 0 days Dolly
20121700	Behaviour of muonim in single-crystal CVD diamond Tair Mamedov, Joint Inst. for Nuclear Research Refused, 0 days Dolly
20121701	Depth-Resolved Measurements of Dynamics in Polymer Thin Films using Spin-Polarized Radioactive Probes Iain D McKenzie, TRIUMF Approved, 5 days LEM
20121702	Suppression of Magnetic Order in Iridium Oxides Michael J Graf, Boston College Approved, 2 days GPS
20121703	Effects of the presence of a superconducting layer in an organic spin valve Laura Nuccio, Univ. Fribourg Approved, 4 days LEM
20121704	Suppression of Magnetic Order in Iridium Oxides Michael J Graf, Boston College Approved, 2 days LTF
20121707	MuSR investigation of magnetic and non-magnetic impurities on the magnetic ground state of SrCuO <sub>2</sub> zig-zag spin chains Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstofforschung Dresden Approved, 3 days GPS
20121708	Low Energy muSR of cuprate thin-films: origin of the surface magnetism and superconductivity of T' structure Ryosuke Kadono, High Energy Acc. Research Org. (KEK) Approved, 3 days LEM
20121709	Co-diluted CeFeAsO: an interesting midpoint between the typical phase diagrams of 122 and F-doped 1111 pnictide materials Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstofforschung Dresden Approved, 2 days GPS
20121710	Muon Knight shift in ferromagnetic superconductor UCoGe Lei Shu, Fudan Univ. Refused, 0 days LTF
20121711	Spin dynamics of 4f-localized ferromagnet CeRu <sub>2</sub> X <sub>2</sub> C (X=Al,Ga;X=B,C) Kwang-Yong Choi, Chung-Ang University Approved, 3 days Dolly
20121713	Low moment ferromagnetism in CeCo <sub>3</sub> B <sub>2</sub> Daniel Andreica, Babes-Bolyai Univ. Approved, 1 days Dolly
20121715	Pressure dependent magnetic phase transitions in disordered antiferromagnet PbFe <sub>1/2</sub> Nb <sub>1/2</sub> O <sub>3</sub> Shravani Chillal, ETH Zuerich Approved, 6 days GPD
20121715	Pressure dependent magnetic phase transitions in disordered antiferromagnet PbFe <sub>1/2</sub> Nb <sub>1/2</sub> O <sub>4</sub> Shravani Chillal, ETH Zuerich Approved, 1 days Dolly

## BVRA-2013 list of PSI $\mu$ SR experiments

20121717	Magnetic order and Spin dynamics in the strongly correlated heavy-fermion system Yb[Rh(1-x)Co(x)] <sub>2</sub> Si <sub>2</sub> Johannes Spehling, Technische Univ. Dresden Approved, 4 days LTF
20121719	Nature of a mixed AFM/fM intermediate phase in the layered quasi-2D spin system Cu <sub>3</sub> Bi(SeO <sub>3</sub> ) <sub>2</sub> O <sub>2</sub> Br Andrej Zorko, Jozef Stefan Inst. Refused, 0 days GPS
20121720	Magnetism in multiferroic PbFe <sub>2/3</sub> W <sub>1/3</sub> O <sub>3</sub> Shravani Chillal, ETH Zuerich Approved, 2 days GPS
20121721	Comparison of Cr <sub>7</sub> Ni-based molecular nanomagnets entangled and non-entangled by a MuSR study. Paolo Arosio, Univ. degli Studi di Milano Refused, 0 days GPS
20121722	Low-energy and bulk MuSR studies of Skyrmions in MnSi, FeGe and Cu <sub>2</sub> OSeO <sub>3</sub> : continuation request Yasutomo J Uemura, Columbia Univ. Approved, 2 days GPS
20121723	Magnetic order in CePt <sub>3</sub> B <sub>1-x</sub> Si <sub>x</sub> Daniela Rauch, Techn. Univ. Braunschweig Approved, 3 days LTF
20121726	Search for a magnetic transition in the magnetically frustrated pyrochlore Er <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> Pierre Dalmas de Reotier, CEA, Grenoble Approved, 2 days LTF
20121727	Comparison of Cr <sub>7</sub> Ni-based molecular nanomagnets entangled and non-entangled by a MuSR study. Paolo Arosio, Univ. degli Studi di Milano Refused, 0 days LTF
20121728	A local probe study of the magnetic ground state of NbFe <sub>2</sub> . Sean R Giblin, Univ. of Cardiff Approved, 2 days Dolly
20121729	Magnetic order in CePt <sub>3</sub> B <sub>1-x</sub> Si <sub>x</sub> Daniela Rauch, Techn. Univ. Braunschweig Approved, 3 days GPS
20121730	d <sub>0</sub> -magnetism in BaB <sub>6</sub> and SrB <sub>6</sub> Andreas Suter, Paul Scherrer Institut Approved, 4 days LEM
20121731	Static and dynamic behavior of field induced staggered moment in the quadrupole ordering phase of PrIr <sub>2</sub> Zn <sub>20</sub> and PrRh <sub>2</sub> Zn <sub>20</sub> Wataru Higemoto, Japan Atomic Energy Agency Approved, 2 days LTF
20121736	Ground States of 2D Triangular Antiferromagnets Ba <sub>3</sub> MTi <sub>2</sub> O <sub>9</sub> (M=Ir, Ru) Kwang-Yong Choi, Chung-Ang University Refused, 0 days LTF
20121738	Unusual Magnetism in the "Nonmagnetic" Black Phase of SmS Takashi U. Ito, Japan Atomic Energy Agency Refused, 0 days LTF
20121739	$\mu$ SR investigation of the skyrmion lattice in insulating Cu <sub>2</sub> OSeO <sub>3</sub> Krunoslav Prsa, EPF Lausanne Refused, 0 days GPS

## BVRA-2013 list of PSI $\mu$ SR experiments

20121740	Static and dynamic behavior of field induced staggered moment in the quadrupole ordering phase of $\text{PrIr}_2\text{Zn}_{20}$ and $\text{PrRh}_2\text{Zn}_{20}$ Wataru Higemoto, Japan Atomic Energy Agency Approved, 2 days GPS
20121743	Emergence of superconductivity in $\text{BaNi}_2(\text{Ge}_{1-x}\text{Px})_2$ at a structural instability Fabian von Rohr, Univ. Zuerich Approved, 3 days LTF
20121744	Magnetic order and Spin dynamics in the strongly correlated heavy-fermion system $\text{Yb}[\text{Rh}(1-x)\text{Co}(x)]_2\text{Si}_2$ Johannes Spehling, Technische Univ. Dresden Approved, 2 days GPS
20121745	Magnetic field driven quantum phase transition and unconventional magnetic ground states in frustrated pyrochlore oxides with effective $S=1/2$ spins Hans-Henning Klauss, Technische Univ. Dresden Approved, 4 days LTF
20121746	Pressure effect on the magnetic and the structural properties of $\text{EuTiO}_3$ Zurab Guguchia, Univ. Zuerich Approved, 6 days GPD
20121749	Tuning the static spin-stripe phase in $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$ by hydrostatic pressure Zurab Guguchia, Univ. Zuerich Approved, 1 days GPS
20121751	Magnetic Properties of Quasi Two-dimensional Triangular Antiferromagnet, $\text{EtMe}_3\text{Sb}[\text{Pd}(\text{dmit})_2]_2$ . Yasuyuki Ishii, Tokyo Medical Univ. Approved, 2 days LTF
20121752	Study of geometrically frustrated magnets on a spinel lattice Alain Yaouanc, CEA, Grenoble Approved, 2 days GPS
20121753	Enhanced dynamics in the magnetically ordered state of $\text{HoCo}_2$ Jiri Prchal, Charles University Approved, 5 days GPD
20121754	A survey of skyrmions Tom Lancaster, Univ. of Durham Approved, 3 days LEM
20121756	An investigation of the superconducting ground state in the $\text{BiS}_2$ -type layered superconductor $\text{Bi}_4\text{O}_4\text{S}_3$ Pabitra Kumar Biswas, Paul Scherrer Institut Approved, 3 days LTF
20121757	Determination of hole capture rates of negative muonium in germanium Thomas Prokscha, Paul Scherrer Institut Approved, 4 days LEM
20121758	Interactions between superconductivity and antiferromagnetism in $\text{CeCo}(\text{In}_{1-x}\text{Cd}_x)_5$ Ludovic Howald, Univ. Zuerich Approved, 2 days GPS
20121759	Interplay of Static Disorder and Magnetic Order in a New $S=1/2$ Random Singlet Chain Compound Manuel Haelg, ETH Zuerich Refused, 0 days LTF
20121760	Emergence of superconductivity in $\text{BaNi}_2(\text{Ge}_{1-x}\text{Px})_2$ at a structural instability Fabian von Rohr, Univ. Zuerich Approved, 2 days GPS

## BVRA-2013 list of PSI $\mu$ SR experiments

20121761	Interplay between magnetism and the Austenite-Martensite transition in Ni <sub>2</sub> MnGa Cr-capped thin films Joshua A Lim, Univ. of Birmingham Approved, 3 days LEM
20121762	Magnetic ordering and spin dynamics in the quasi-one-dimensional spin-chain oxide Ca <sub>3</sub> Co <sub>2</sub> O <sub>6</sub> Vivek K. Malik, Indian Institute of Technology Patna Refused, 0 days GPS
20121763	Out-of-plane magnetic field profile in type-I and type-II superconducting films in a transverse magnetic field. Vladimir Kozhevnikov, Tulsa Community College Approved, 4 days LEM
20121764	Effect of pressure on FeSeTe Markus M. Bendele, Univ. di Roma La Sapienza Approved, 7 days GPD
20121765	Spin Frustration in Iridate Systems, and the Role of the Spin-Orbit Coupling. Paul G Freeman, EPF Lausanne Refused, 0 days GPS
20121768	Superconducting properties of CaSrAlSi Markus M. Bendele, Univ. di Roma La Sapienza Approved, 2 days Dolly
20121769	Superconducting properties of CaSrAlSi Markus M. Bendele, Univ. di Roma La Sapienza Approved, 7 days GPD
20121771	Superconductivity in Ca <sub>3</sub> Ir <sub>4</sub> Sn <sub>13</sub> and Sr <sub>3</sub> Ir <sub>4</sub> Sn <sub>13</sub> and its possible interplay with FM fluctuations and charge ordering. Pabitra Kumar Biswas, Paul Scherrer Institut Approved, 3 days Dolly
20121772	The electronic phase diagram of Co-doped LaFe(1-x)Co(x)AsO Hemke Maeter, Technische Univ. Dresden Approved, 4 days Dolly
20121773	New iron-based superconductors containing molecular intercalates Stephen J Blundell, Univ. of Oxford Approved, 3 days GPS
20121776	Effects of external pressure on the superconducting properties of optimally F-doped LaFeAsO: critical temperature and superfluid density Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung Dresden Approved, 6 days GPD
20121777	Pressure effect on the phase separation and magnetic penetration depth of anion site substituted 122-iron chalcogenides: AxFe <sub>2</sub> -ySe <sub>2</sub> -zXz (A=K or Rb; X= S or Te) probed by $\mu$ SR technique Anna Krzton-Maziopa, Warsaw Univ. of Technology Refused, 0 days GPD
20121778	Magnetic Ordering of two frustarted low-dimensional V <sup>3+</sup> halides Reinhard K Kremer, Max Planck Institute for Solid State Research Approved, 2 days GPS
20121780	Long range magnetic ordering and spin dynamics in the itinerant magnets V <sub>1-x</sub> Cr <sub>x</sub> PtGe (x=0, 0.1, 0.2) Helge Rosner, Max-Planck-Inst. fuer Chemische Physik fester Stoffe Approved, 2 days Dolly
20121781	A copper-based molecular magnet with a high transition temperature Stephen J Blundell, Univ. of Oxford Approved, 1 days GPS

## BVRA-2013 list of PSI $\mu$ SR experiments

20121782	Effects of external pressure on the superconducting properties of optimally F-doped LaFeAsO: critical temperature and superfluid density Giacomo Prando, Leibniz-Inst. fuer Festkoerper- und Werkstoffforschung Dresden Approved, 1 days Dolly
20121783	Ground State of the New S=1/2 Kagome Compound, Sr-Vesignieite Philippe Mendels, Univ. Paris XI Approved, 2 days GPS
20121784	Bose Glass and Bose Einstein Condensation in a Quantum Magnet Erik Wulf, ETH Zuerich Approved, 2 days LTF
20121785	Phase diagram and superconductivity in the proximity of magnetic order in (Ca <sub>1-x</sub> Lax) <sub>10</sub> (FeAs) <sub>10</sub> Pt <sub>3</sub> As <sub>8</sub> Dirk Johrendt, Ludwig-Maximilian Univ. Muenchen LMU Approved, 3 days Dolly
20121788	Magnetic field driven quantum phase transition and unconventional magnetic ground states in frustrated pyrochlore oxides with effective S=1/2 spins Hans-Henning Klauss, Technische Univ. Dresden Approved, 1 days GPS
20121789	Orbital Order and Complex Magnetism in the layered Transition Metal Oxychalcogenides La <sub>2</sub> O <sub>2</sub> T <sub>2</sub> OSe <sub>2</sub> (T=Fe,Co,Mn) Hans-Henning Klauss, Technische Univ. Dresden Approved, 2 days Dolly
20121791	Evolution of the two superconducting gaps in Lu <sub>2</sub> Fe <sub>3</sub> Si <sub>5</sub> under hydrostatic pressure Pabitra Kumar Biswas, Paul Scherrer Institut Approved, 6 days GPD
20121792	Interplay of Static Disorder and Magnetic Order in a New S=1/2 Random Singlet Chain Compound Manuel Haelg, ETH Zuerich Refused, 0 days GPS
20121793	Determination of hole capture rates of negative muonium in germanium Thomas Prokscha, Paul Scherrer Institut Approved, 2 days Dolly
20121794	Study of the Cooper pair diffraction effect on vortex lattice in highly pure Nb Alexander Maisuradze, Paul Scherrer Institut Approved, 2 days Dolly
20121795	$\mu$ SR investigation of new superconducting derivatives of Pr <sub>3</sub> Rh <sub>4</sub> Sn <sub>13</sub> type Alexander Maisuradze, Paul Scherrer Institut Refused, 0 days GPS
20121796	$\mu$ SR investigation of new superconducting derivatives of Pr <sub>3</sub> Rh <sub>4</sub> Sn <sub>13</sub> type Alexander Maisuradze, Paul Scherrer Institut Refused, 0 days LTF
20121797	Magnetic order and spin dynamics of the frustrated one-dimensional quantum magnet LiCuSbO <sub>4</sub> Hemke Maeter, Technische Univ. Dresden Refused, 0 days LTF
20121798	Magnetic order and spin dynamics of the frustrated one-dimensional quantum magnet LiCuSbO <sub>4</sub> Hemke Maeter, Technische Univ. Dresden Refused, 0 days GPS
20121800	Superconductivity and Magnetism in a new Titanium-Based Oxypnictide Superconductor: Ba <sub>1-x</sub> NaxTi <sub>2</sub> Sb <sub>2</sub> O Hans-Henning Klauss, Technische Univ. Dresden Approved, 3 days GPS



## BVRA-2013 list of PSI $\mu$ SR experiments

20121803	Superconductivity in $\text{Ca}_3\text{Ir}_4\text{Sn}_{13}$ and $\text{Sr}_3\text{Ir}_4\text{Sn}_{13}$ and its possible interplay with FM fluctuations and charge ordering. Pabitra Kumar Biswas, Paul Scherrer Institut Approved, 7 days GPD
20121804	Appearance of a New Magnetic Phases and Competition of Magnetism and Superconductivity in $\text{Ba}_{1-x}(\text{K},\text{Na})_x\text{Fe}_2\text{As}_2$ as a Function of Pressure Dirk Johrendt, Ludwig-Maximilian Univ. Muenchen LMU Approved, 2 days GPS
20121805	$\mu$ SR Investigation of recently discovered Cobalt Oxyfluoride compounds Martin Mansson, EPF Lausanne Approved, 2 days Dolly

## Continuations

20121234	$\mu$ SR versus Raman Amit Keren, The Israel Inst. of Technology - Technion Approved, 4 days GPS
20121647	Effect of photo-induced hole doping on the Meissner screening in underdoped $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Evelyn Stilp, Univ. Zuerich Approved, 4 days LEM
20121651	Muonium study of a CZTS-based p-n junction Rui C Vilao, Univ. of Coimbra Approved, 5 days LEM
20121656	Interplay of magnetism and superconductivity in $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ single crystals Christian Bernhard, Univ. Fribourg Approved, 4 days Dolly
20121668	Li diffusion in spinel-type battery material films Jun Sugiyama, Toyota Central R&D Labs., Inc. Approved, 4 days LEM
20121679	Study of geometrically frustrated magnets on a spinel lattice Alain Yaouanc, CEA, Grenoble Approved, 3 days LTF
20121684	Low energy muon study of self-organized GeMn nanocolumns Pierre Dalmas de Reotier, CEA, Grenoble Approved, 4 days LEM
20121685	Investigation of high-frequency muon precession in palladium bionanomaterial Anna Williams, Univ. of Birmingham Refused, 0 days Dolly
20121687	d <sub>0</sub> -magnetism in $\text{BaB}_6$ and $\text{SrB}_6$ Andreas Suter, Paul Scherrer Institut Approved, 1 days Dolly
20121692	Spin Frustration in Iridate Systems, and the Role of the Spin-Orbit Coupling. Paul G Freeman, EPF Lausanne Refused, 0 days LTF

## BVRA-2013 list of PSI $\mu$ SR experiments

20121693	Study of ferromagnetism in dilute ferromagnetic semiconducting Co-doped TiO <sub>2</sub> thin films Hassan Saadaoui, Paul Scherrer Institut Approved, 8 days LEM
20121694	Measurement of the Magnetic Properties of Single Molecule Magnets Thin Films and Monolayers Zaher Salman, Paul Scherrer Institut Approved, 5 days LEM
20121705	Ion-size dependence of superfluid density and magnetic interactions in HTS cuprates Ben P Mallett, New Zealand Inst. for Industrial Research Approved, 3 days GPS
20121706	Low-energy and bulk $\mu$ SR studies of Skyrmions in MnSi, FeGe and Cu <sub>2</sub> OSeO <sub>3</sub> : continuation request Yasutomo J Uemura, Columbia Univ. Approved, 5 days LEM
20121712	Spin Ice - Cold but not Frozen Sarah R Dunsiger, Techn. Univ. Muenchen Approved, 4 days LEM
20121714	Instabilities in the pressure phase diagram of CeCoIn <sub>5</sub> Ludovic Howald, Univ. Zuerich Approved, 7 days GPD
20121716	Interactions between superconductivity and antiferromagnetism in CeCo(In <sub>1-x</sub> Cd <sub>x</sub> ) <sub>5</sub> Ludovic Howald, Univ. Zuerich Approved, 5 days LTF
20121718	Study of the effect of uniaxial pressure on the superfluid density in LScO thin films Ludovic Howald, Univ. Zuerich Approved, 4 days LEM
20121725	Field induced magnetism in optimally doped LScO thin films Ludovic Howald, Univ. Zuerich Refused, 0 days LEM
20121732	Unusual Magnetism in the "Nonmagnetic" Black Phase of SmS Takashi U. Ito, Japan Atomic Energy Agency Refused, 0 days GPS
20121733	Ground States of 2D Triangular Antiferromagnets Ba <sub>3</sub> MTi <sub>2</sub> O <sub>9</sub> (M=Ir, Ru) Kwang-Yong Choi, Chung-Ang University Refused, 0 days GPS
20121734	Tuning the static spin-stripe phase in La <sub>2-x</sub> Ba <sub>x</sub> CuO <sub>4</sub> by hydrostatic pressure Zurab Guguchia, Univ. Zuerich Approved, 7 days GPD
20121747	Quantum Phase Transition in a quasi-2D spin-1/2 dimer system Piperazinium hexachlorodocuprate (PHCC) Matthias Carsten Thede, Paul Scherrer Institut Approved, 8 days GPD

## BVRA-2013 list of PSI $\mu$ SR experiments

20121748	Pressure dependence of magnetism and superconductivity in NaFe <sub>1-x</sub> CoxAs Stephen J Blundell, Univ. of Oxford Approved, 7 days GPD
20121750	Enhanced dynamics in the magnetically ordered state of HoCo <sub>2</sub> Jiri Prchal, Charles University Approved, 1 days Dolly
20121755	Spin Polarized Superconductivity in Ferromagnets Mehmet Egilmez, Univ. of Cambridge Approved, 4 days LEM
20121766	Functionalized heterostructures with EuO Peter J Baker, Rutherford Appleton Lab. Refused, 0 days LEM
20121770	Measurement of Phase Transitions in Artificial Spin Ice Luca Anghinolfi, Paul Scherrer Institut Approved, 4 days LEM
20121774	Odd-frequency spin-triplet superconductivity in Ferromagnetic- Superconducting Devices Stephen L Lee, Univ. of St. Andrews Approved, 6 days LEM
20121775	LiFeAs - A superconductor close to ferromagnetism Hemke Maeter, Technische Univ. Dresden Approved, 3 days Dolly
20121779	Paramagnetic Muonium as an Electron Spin Detector in Semiconductor Heterostructures Sarah R Dunsiger, Techn. Univ. Muenchen Approved, 3 days LEM
20121786	Search for the magnetic monopole image charge in topological insulators Zaher Salman, Paul Scherrer Institut Approved, 5 days LEM
20121790	Magnetic properties of FM SrRuO <sub>3</sub> and AFM LuMnO <sub>3</sub> bilayers Christof W. Schneider, Paul Scherrer Institut Approved, 4 days LEM
20121799	Absolute Value of the Magnetic Penetration Depth and Field Profile in the Meissner State of Exotic Superconductors. Robert F Kiefl, Univ. British Columbia Approved, 6 days LEM
20121802	Appearance of a New Magnetic Phases and Competition of Magnetism and Superconductivity in Ba <sub>1-x</sub> (K,Na) <sub>x</sub> Fe <sub>2</sub> As <sub>2</sub> as a Function of Pressure Dirk Johrendt, Ludwig-Maximilian Univ. Muenchen LMU Approved, 8 days GPD