

PSI, Villigen  
February 8, 2017

**MINUTES "BESCHLUSSKONFERENZ"  
OF THE USERS MEETING BV 48 AT PSI  
February 6 – 8, 2017**

present: Dr. K. Clausen (Chairman)  
Prof. B. Filippone  
Prof. Dr. K. Kirch  
Dr. J. Grillenberger  
Prof. Dr. E. Morenzoni  
Dr. S. Ritt (Secretary)

excused: Prof. C. Bernhard  
Prof. Dr. J. Mesot  
Prof. Dr. R. Horisberger  
Prof. Dr. L. Rivkin  
Dr. M. Seidel

# 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

- 20161066 Database preparation for the chemical and tension status of the steels in pre-stressed concretes of aged architectures to be examined by cosmic-ray muon spin rotation  
Eiko Torikai, Univ. of Yamanashi  
Approved, 3 days GPD
- 20161914 Database preparation for the chemical status of the steels in reinforced concretes of aged architectures to be examined by cosmic-ray muon spin rotation  
Eiko Torikai, Univ. of Yamanashi  
Approved, 2 days Dolly
- 20161075 Vortex Lattice in Thin Film, Optimally Doped YBa(2)Cu(3)O(7-delta)  
Andreas Suter, Paul Scherrer Institut  
Approved, 4 days LEM
- 20161695 Dynamics in DOPC: muon hyperfine coupling constants for an 18:1 delta-9 cis chain  
Nigel J Clayden, Univ. of East Anglia  
Approved, 2 days GPD
- 20161729 Tuning Magnetic Phases Close to the Kitaev Point  
Gediminas Simutis, Paul Scherrer Institut  
Approved, 6 days GPD
- 20161852 Tuning Magnetic Phases Close to the Kitaev Point  
Gediminas Simutis, Paul Scherrer Institut  
Approved, 1 days GPS
- 20161730 MuSR study of Sr<sub>2</sub>CuTe<sub>1-x</sub>W<sub>x</sub>O<sub>6</sub>  
Jochen Litterst, Techn. Univ. Braunschweig  
Approved, 4 days Dolly
- 20161741 Critical behaviour at the quantum critical points of a molecular exchange-coupled spin-dimer system  
Tom Lancaster, Univ. of Durham  
Approved, 6 days HAL-9500
- 20161742 Pressure dependent quantum critical behavior of the heavy fermion compound CeCoGe<sub>2.2</sub>Si<sub>0.8</sub>  
Julio Antonio Larrea Jimenez, Centro Brasileiro de Pesquisas Fisicas  
Refused, 0 days GPD

- 20161743 The effect of controlled amounts of disorder on the local magnetism in a skyrmion lattice material  
Tom Lancaster, Univ. of Durham  
Refused, 0 days GPS
- 20161745 Search for time-reversal symmetry breaking in the non-centrosymmetric superconductors  $\text{CaPtAs}$  and  $\text{BaPt}_{0.85}\text{As}_{0.9}$   
Tian Shang, Paul Scherrer Institut  
Approved, 3 days LTF
- 20161749 Magnetic order parameter, magnetic dynamics and magnetic moment of Ir in  $\text{Sr}_2\text{BIrO}_6$  double perovskites.  
Maria A Laguna-Marco, Inst. de Ciencia de Materiales de Aragon, Univ de Zaragoza - CSIC  
Approved, 2 days GPS
- 20161750 Magnetic skyrmion phase in Co-Zn-Mn thin film alloys  
Tom Lancaster, Univ. of Durham  
Approved, 3 days LEM
- 20161755 Magnetic order and spin dynamics in  $\text{Ho}_2\text{Ir}_2\text{O}_7$   
Lieh-Jeng Chang, National Chen Kung Univ.  
Refused, 0 days GPS
- 20161757 Magnetic ground states in  $S=1$  molecular complexes  
Tom Lancaster, Univ. of Durham  
Approved, 2 days LTF
- 20161876 Magnetic ground states in  $S=1$  molecular complexes  
Tom Lancaster, Univ. of Durham  
Approved, 2 days GPS
- 20161760  $\text{NiCl}_2(1-x)\text{-Br}_x\text{4SC(NH}_2)_2$ : the critical bond disorder case  
Alexandra Mannig, ETH Zuerich  
Approved, 4 days LTF
- 20161845  $\text{NiCl}_2(1-x)\text{-Br}_x\text{4SC(NH}_2)_2$ : the critical bond disorder case  
Alexandra Mannig, ETH Zuerich  
Approved, 3 days GPS
- 20161761 The Dynamics of Soliton Lattices in  $\text{YBaCuFeO}_5$  Crystal  
Lieh-Jeng Chang, National Chen Kung Univ.  
Refused, 0 days HAL-9500
- 20161854 The Dynamics of Soliton Lattices in  $\text{YBaCuFeO}_5$  Crystal  
Lieh-Jeng Chang, National Chen Kung Univ.  
Approved, 1 days GPS
- 20161768 Ultra-high sensitivity probing of substrate interaction induced magnetism in hydrogen functionalized graphene  
Steven P Bennett, The United States Naval Research Laboratory  
Approved, 5 days LEM

- 20161769 Probing the spin dynamics in an artificial geometrically frustrated lattice via muon spin relaxation  
Xiaoran Liu, University of Arkansas  
Approved, 4 days LEM
- 20161772 Superconducting phase of V-doped ZrB<sub>2</sub> and HfB<sub>2</sub> studied via transverse-field  $\mu$ SR  
Toni Shiroka, ETH Zuerich  
Approved, 2 days GPS
- 20161899 Superconducting phase of V-doped ZrB<sub>2</sub> and HfB<sub>2</sub> studied via transverse-field  $\mu$ SR  
Toni Shiroka, ETH Zuerich  
Approved, 2 days LTF
- 20161774 Low-energy  $\mu$ SR investigation of the magnetic skyrmions in SrIrO<sub>3</sub>/SrRuO<sub>3</sub> heterostructure  
Zhiming Wang, Paul Scherrer Institut  
Approved, 4 days LEM
- 20161912 Low-energy  $\mu$ SR investigation of the magnetic skyrmions in SrIrO<sub>3</sub>/SrRuO<sub>3</sub> heterostructure  
Zhiming Wang, Paul Scherrer Institut  
Approved, 1 days Dolly
- 20161775 Investigating the pressure-enhanced magnetism in spin-ladder superconductor BaFe<sub>2</sub>S<sub>3</sub>  
Benjamin A Frandsen, Columbia Univ.  
Approved, 6 days GPD
- 20161778 Probing the electronic phase diagram of Sr<sub>2</sub>Ir<sub>1-x</sub>Pt<sub>x</sub>O<sub>4</sub>  
Rajib Sarkar, Technische Univ. Dresden  
Refused, 0 days Dolly
- 20161790 Novel spin textures in magnetically doped Weyl semimetals  
Jonas A Krieger, ETH Zuerich  
Approved, 6 days Dolly
- 20161791 Investigation of phase separation and charge ordering in La<sub>0.825</sub>Sr<sub>0.125</sub>MnO<sub>3</sub>  
Rinat F Mamin, Zavoisky Physical-Technical Inst. of Russian Academy of Sciences  
Refused, 0 days Dolly
- 20161793 Static and dynamic molecular magnetism in the natural mineral boleite  
Dmytro Inosov, Technische Univ. Dresden  
Approved, 2 days Dolly
- 20161794 Magnetism of S=1/2 Square Cupolas in Ba(TiO)Cu<sub>4</sub>(PO<sub>4</sub>)<sub>4</sub>  
Gediminas Simutis, Paul Scherrer Institut  
Approved, 2 days GPS

- 20161822 Magnetism of  $S=1/2$  Square Cupolas in  $\text{Ba}(\text{TiO})\text{Cu}_4(\text{PO}_4)_4$   
Gediminas Simutis, Paul Scherrer Institut  
Approved, 5 days GPD
- 20161795 Magnetic structures and textures in the temperature-field phase diagram of  $\text{MnSi}$   
Pierre Dalmas de Reotier, CEA, Grenoble  
Approved, 3 days GPS
- 20161797 Controlling magnetic order in a quasi-1D compound using spin density and pressure  
Martin Mansson, Royal Inst. of Technology (KTH)  
Approved, 6 days GPD
- 20161944 Controlling magnetic order in a quasi-1D compound using spin density and pressure  
Martin Mansson, Royal Inst. of Technology (KTH)  
Refused, 0 days LTF
- 20161943 Controlling magnetic order in a quasi-1D compound using spin density and pressure  
Martin Mansson, Royal Inst. of Technology (KTH)  
Approved, 3 days Dolly
- 20161799 Magnetic Ordering and Spin Dynamics driven by p-orbital in Alkali Metal Superoxide,  $\text{RbO}_2$  and  $\text{NaO}_2$   
Fahmi Astuti, Hokkaido Univ.  
Approved, 2 days Dolly
- 20161916 Magnetic Ordering and Spin Dynamics driven by p-orbital in Alkali Metal Superoxide,  $\text{RbO}_2$  and  $\text{NaO}_2$   
Fahmi Astuti, Hokkaido Univ.  
Refused, 0 days GPS
- 20161800 Investigation of magnetic orders on a quantum phase transition in  $(\text{Y}_{1-x}\text{Ca}_x)_2\text{Ir}_2\text{O}_7$   
Retno Asih, RIKEN  
Refused, 0 days Dolly
- 20161924 Investigation of magnetic orders on a quantum phase transition in  $(\text{Y}_{1-x}\text{Ca}_x)_2\text{Ir}_2\text{O}_7$   
Retno Asih, RIKEN  
Refused, 0 days GPS
- 20161801 Magnetic Interaction and Spin Tomonaga Luttinger Liquid in the p-Orbital Antiferromagnet,  $\text{Cs}_{1-x}\text{Rb}_x\text{O}_2$  and  $\text{Cs}_{1-x}\text{K}_x\text{O}_2$  ( $x=0.05$  ;  $0.1$ )  
Fahmi Astuti, Hokkaido Univ.  
Refused, 0 days GPS
- 20161917 Magnetic Interaction and Spin Tomonaga Luttinger Liquid in the p-Orbital Antiferromagnet,  $\text{Cs}_{1-x}\text{Rb}_x\text{O}_2$  and  $\text{Cs}_{1-x}\text{K}_x\text{O}_2$  ( $x=0.05$  ;  $0.1$ )  
Fahmi Astuti, Hokkaido Univ.  
Refused, 0 days Dolly

- 20161805 Magnetic relaxation of surface-grafted Yb(trensal-thiophene) qubits  
Stergios Piligkos, Univ. Copenhagen  
Approved, 3 days LEM
- 20161812 Magnetic relaxation of surface-grafted Yb(trensal-thiophene) qubits  
Stergios Piligkos, Univ. Copenhagen  
Approved, 2 days GPS
- 20161806  $\mu$ SR study of the non-centrosymmetric superconductor LaPtGe  
Tian Shang, Paul Scherrer Institut  
Approved, 3 days LTF
- 20161807  $\mu$ SR study of the non-centrosymmetric superconductor LaPtGe  
Tian Shang, Paul Scherrer Institut  
Approved, 1 days GPS
- 20161818 Investigation of a New Heisenberg-Kitaev Quantum Spin Liquid Candidate  
Bella Lake, Helmholtz Zentrum Berlin fuer Materialien und Energie  
Approved, 3 days Dolly
- 20161820 Magnetic order in the  $\gamma$ -MnAs phase  
Luana Caron, Max-Planck-Inst. fuer Chemische Physik fester Stoffe  
Approved, 2 days GPS
- 20161821 Searching for time reversal symmetry breaking in the heavy fermion  
superconductor CeCu<sub>2</sub>Si<sub>2</sub>  
Michael Smidman, Zhejiang Univ.  
Refused, 0 days LTF
- 20161824  $\mu$ SR measurements on frustrated Sm based pyrochlores  
Viviane Pecanha Antonio, Juelich Center for Neutron Science  
Approved, 8 days HAL-9500
- 20161825 Using strain to tune the ground state of  $\alpha$ -RuCl<sub>3</sub>  
Gediminas Simutis, Paul Scherrer Institut  
Refused, 0 days Dolly
- 20161826 Light induced spin dynamics in bulk iron based spin crossover systems  
Pietro Carretta, Univ. degli Studi di Pavia  
Approved, 4 days GPS
- 20161830 Muon-spin rotation study of stoichiometric single crystalline CaKFe<sub>4</sub>As<sub>4</sub>  
Rustem Khasanov, Paul Scherrer Institut  
Refused, 0 days GPS
- 20161831 Field effects and Rashba-type superconducting phase study in multiferroic  
Ge<sub>0.87</sub>Mn<sub>0.13</sub>Te  
Juraj Krempasky, Paul Scherrer Institut  
Approved, 3 days LEM
- 20161832 Anisotropic dynamics near the surface of a polymer  
Francis L Pratt, Rutherford Appleton Lab.  
Refused, 0 days LEM

- 20161836 Effective interlayer interactions in two vanadium based  $S=1/2$  kagome compounds  
Jean-Christophe Orain, Paul Scherrer Institut  
Approved, 3 days LTF
- 20161838 Effective interlayer interactions in two vanadium based  $S=1/2$  kagome compounds  
Jean-Christophe Orain, Paul Scherrer Institut  
Approved, 3 days GPS
- 20161837 Pressure induced change from the second to the first order magnetic transition in FeSe  
Rustem Khasanov, Paul Scherrer Institut  
Approved, 8 days GPD
- 20161839 Study of magnetic phase in LaVO<sub>3</sub> thin films under epitaxial strain  
Hugo Meley, Univ. Geneve  
Approved, 4 days LEM
- 20161846 MuSR study on the hidden order in Irridates  
Lei Shu, Fudan Univ.  
Approved, 3 days GPS
- 20161847 Detailed investigation of magnetic, structural, and electronic phase separation in the metal-insulator transition of V<sub>2</sub>O<sub>3</sub>  
Benjamin A Frandsen, Columbia Univ.  
Approved, 4 days LEM
- 20161853 MuSR Study of the Superconducting Paring Symmetry in the Underdoped Single Crystals of Electron-Doped T'-Cuprates  
Tadashi Adachi, Sophia Univ.  
Refused, 0 days GPS
- 20161860 MuSR Study of the Superconducting Paring Symmetry in the Underdoped Single Crystals of Electron-Doped T'-Cuprates  
Tadashi Adachi, Sophia Univ.  
Refused, 0 days Dolly
- 20161856 Exploring the Magnetic Dynamics and Long Range Ordering in (CP\*)-RE-(COT)  
Zhengqiang Yang, Queen Mary, Univ. of London  
Refused, 0 days GPS
- 20161892 Exploring the Magnetic Dynamics and Long Range Ordering in (CP\*)-RE-(COT)  
Zhengqiang Yang, Queen Mary, Univ. of London  
Refused, 0 days LTF
- 20161857 Magnetic Characterization of Materials for Energy Nanonics  
Martin Mansson, Royal Inst. of Technology (KTH)  
Approved, 4 days Dolly

- 20161858 Comparison of Pairing Symmetry in Topological Superconductor  $\text{Sr}_{0.1}\text{Bi}_2\text{Se}_3$  and topological crystalline superconductor  $\text{Sn}_{0.5}\text{In}_{0.5}\text{Te}$   
Satyabrata Patnaik, Jawaharlal Nehru Univ.  
Approved, 3 days LTF
- 20161870 Comparison of Pairing Symmetry in Topological Superconductor  $\text{Sr}_{0.1}\text{Bi}_2\text{Se}_3$  and topological crystalline superconductor  $\text{Sn}_{0.5}\text{In}_{0.5}\text{Te}$   
Satyabrata Patnaik, Jawaharlal Nehru Univ.  
Approved, 3 days GPS
- 20161859 Magnetic and superconducting properties of  $\text{FeSe}_{1-x}\text{S}_x$  ( $x=0.2$ ) in comparison to other iron-chalcogenides  
Stefan P. Holenstein, Univ. Zuerich  
Approved, 2 days GPS
- 20161862 Magnetic and superconducting properties of  $\text{FeSe}_{1-x}\text{S}_x$  ( $x=0.2$ ) in comparison to other iron-chalcogenides  
Stefan P. Holenstein, Univ. Zuerich  
Approved, 8 days GPD
- 20161863 Search for spin liquid ground state in the disordered double perovskite  $\text{BaTi}_{0.5}\text{Mn}_{0.5}\text{O}_3$   
Rajib Sarkar, Technische Univ. Dresden  
Approved, 2 days LTF
- 20161878 Search for spin liquid ground state in the disordered double perovskite  $\text{BaTi}_{0.5}\text{Mn}_{0.5}\text{O}_3$   
Rajib Sarkar, Technische Univ. Dresden  
Approved, 2 days GPS
- 20161865 Studies on zero-field magnetism of layered organic antiferromagnet situated near superconducting phase by muon spin rotation  
Hiromi Taniguchi, Saitama Univ.  
Refused, 0 days GPS
- 20161901 Studies on zero-field magnetism of layered organic antiferromagnet situated near superconducting phase by muon spin rotation  
Hiromi Taniguchi, Saitama Univ.  
Approved, 4 days Dolly
- 20161867  $\mu\text{SR}$  investigation on the triangular lattice iridate  $\text{Ba}_3\text{Lulr}_2\text{O}_9$   
Tusharkanti Dey, Univ. Augsburg  
Approved, 3 days LTF
- 20161882  $\mu\text{SR}$  investigation on the triangular lattice iridate  $\text{Ba}_3\text{Lulr}_2\text{O}_9$   
Tusharkanti Dey, Univ. Augsburg  
Approved, 2 days GPS
- 20161868 Magnetic ground state of linarite as studied by  $\mu\text{SR}$   
Stefan Suellow, Techn. Univ. Braunschweig  
Refused, 0 days GPS



- 20161869 Pressure dependent  $\mu$ SR study of the frustrated hyper-honeycomb magnet beta-Li<sub>2</sub>IrO<sub>3</sub>  
Mayukh Majumder, Univ. Augsburg  
Approved, 6 days GPD
- 20161873 Investigations of Hyperfine Interactions on Muons Attached to Synthetic DNA Model Molecules  
Isao Watanabe, RIKEN  
Approved, 2 days Dolly
- 20161902 Investigations of Hyperfine Interactions on Muons Attached to Synthetic DNA Model Molecules  
Isao Watanabe, RIKEN  
Refused, 0 days GPS
- 20161879 Muon Spin Relaxation on Sr<sub>2</sub>RuO<sub>4</sub> Under Uniaxial Strain  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 5 days Dolly
- 20161887 Probing stray field distributions in silver arising from a patterned ferromagnetic film  
Ian Terry, Univ. of Durham  
Approved, 3 days LEM
- 20161888 Controlling the magnetism in the spinel Co<sub>2</sub>TiO<sub>4</sub> through doping and substitution  
Stephen J Blundell, Univ. of Oxford  
Approved, 2 days GPS
- 20161890 The Interplay of Magnetic Order and Spin Dynamics with the Fermi surface topology and Magnetotransport in the Magnetic Weyl Semimetals RPtBi  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 1 days GPS
- 20161950 The Interplay of Magnetic Order and Spin Dynamics with the Fermi surface topology and Magnetotransport in the Magnetic Weyl Semimetals RPtBi  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 6 days HAL-9500
- 20161893 Superconductivity in binary oxide  
Jiabao Yi, Univ. of New South Wales  
Approved, 4 days LEM
- 20161894 Muon spin relaxation measurement for Double perovskites Sr<sub>2</sub>FeIrO<sub>6</sub>, Sr<sub>2</sub>ZrIrO<sub>6</sub>, La<sub>2</sub>FeIrO<sub>6</sub>.  
Kishor Chand Kharkwal, Jawaharlal Nehru Univ.  
Refused, 0 days GPS
- 20161896 Studies on magnetism of charge cluster glass by muon spin relaxation method  
Hiromi Taniguchi, Saitama Univ.  
Refused, 0 days GPS

- 20161900 Studies on magnetism of charge cluster glass by muon spin relaxation method  
Hiromi Taniguchi, Saitama Univ.  
Refused, 0 days Dolly
- 20161897 Possibility of f-d exchange interactions with magnetic doping in Y2Ir2O7  
Harish Kumar, Jawaharlal Nehru Univ.  
Refused, 0 days GPS
- 20161903 Superconducting Pairing Symmetry of Single-Crystal Organic Superconductor  $\lambda$ -(BETS)<sub>2</sub>GaCl<sub>4</sub> Studied by  $\mu$ SR  
Dita P. Sari, RIKEN  
Refused, 0 days HAL-9500
- 20161908 Magnetic Ordered State of Diluted Magnetic Semiconductor, Ge<sub>1-x</sub>MnxTe  
Isao Watanabe, RIKEN  
Refused, 0 days Dolly
- 20161910 Magnetic Ordered State of Diluted Magnetic Semiconductor, Ge<sub>1-x</sub>MnxTe  
Isao Watanabe, RIKEN  
Refused, 0 days GPS
- 20161911  $\mu$ SR study of the magnetic ordering in the S=1 linear chain compounds ANiCl<sub>3</sub>:A =Cs, Rb, Tl, K.  
Dirk Visser, Loughborough Univ.  
Refused, 0 days GPS
- 20161915  $\mu$ SR study of the magnetic ordering in the S=1 linear chain compounds ANiCl<sub>3</sub>:A =Cs, Rb, Tl, K.  
Dirk Visser, Loughborough Univ.  
Approved, 2 days Dolly
- 20161913 Investigation of the nematic phase in the 2-dimensional frustrated compound BaCdVO(PO<sub>4</sub>)<sub>2</sub>  
Markos Skoulatos, Techn. Univ. Muenchen  
Approved, 6 days HAL-9500
- 20161918 Quantum critical point beneath the superconducting dome in BaFe<sub>2</sub>(As<sub>1-x</sub>Px)<sub>2</sub>  
Vadim Grinenko, Technische Univ. Dresden  
Approved, 5 days Dolly
- 20161919 High magnetic field study of the frustrated quantum magnet Cs<sub>2</sub>CuCl<sub>4</sub>  
Stephen J Blundell, Univ. of Oxford  
Approved, 3 days HAL-9500
- 20161920 Pressure evolution of the symmetry of the superconducting gaps of new-structure-type Fe-Based Superconductors: CaKFe<sub>4</sub>As<sub>4</sub>  
Pabitra Kumar Biswas, Rutherford Appleton Lab.  
Approved, 6 days GPD

- 20161923 Probing the quantum phase transition in Mott-Hubbard systems BaCoS<sub>2</sub> and NiS<sub>2</sub> tuned by pressure  
Zurab Guguchia, Columbia Univ.  
Approved, 8 days GPD
- 20161925 Probing the quantum phase transition in Mott-Hubbard systems BaCoS<sub>2</sub> and NiS<sub>2</sub> tuned by pressure  
Zurab Guguchia, Columbia Univ.  
Approved, 1 days GPS
- 20161928 Magnetic behavior in BaGd<sub>2</sub>-xEuO<sub>4</sub>  
Julian A Munevar Cagigas, Paul Scherrer Institut  
Refused, 0 days Dolly
- 20161931 Modification of superconductivity, magnetic order and electronic nematic order in Fe-based superconductors via in-plane uniaxial strain  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 5 days Dolly
- 20161937 Bragg glass to vortex glass phase transition in superconducting vanadium  
Camilla B Larsen, Univ. of Birmingham  
Approved, 5 days Dolly
- 20161942 Bragg glass to vortex glass phase transition in superconducting vanadium  
Camilla B Larsen, Univ. of Birmingham  
Refused, 0 days Dolly
- 20161939 Quantum Critical Behavior in Ge-doped FeGa<sub>3</sub> single crystals  
Julian A Munevar Cagigas, Paul Scherrer Institut  
Approved, 3 days Dolly
- 20161940 Proximity effects in topological insulator/superconductor heterostructures  
Zaher Salman, Paul Scherrer Institut  
Approved, 4 days LEM
- 20161941 Surface current states of Weyl semimetals  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 5 days HAL-9500
- 20161956 Surface current states of Weyl semimetals  
Hans-Henning Klauss, Technische Univ. Dresden  
Approved, 1 days GPS
- 20161945 Probing the microscopic superconducting properties of Weyl Semimetal Candidate MoTe<sub>1.8</sub>S<sub>0.2</sub>: Pressure dependent studies  
Zurab Guguchia, Columbia Univ.  
Approved, 5 days GPD

- 20161948 Probing the microscopic superconducting properties of Weyl Semimetal Candidate MoTe<sub>1.8</sub>Se<sub>0.2</sub>: Pressure dependent studies  
Zurab Guguchia, Columbia Univ.  
Approved, 2 days Dolly
- 20161946 Search for surface magnetic ordering in the topological Kondo insulator SmB<sub>6</sub> nanoparticles.  
Pabitra Kumar Biswas, Rutherford Appleton Lab.  
Approved, 3 days Dolly
- 20161947 Search for surface magnetic ordering in the topological Kondo insulator SmB<sub>6</sub> nanoparticles.  
Pabitra Kumar Biswas, Rutherford Appleton Lab.  
Refused, 0 days GPS

## 2. Beam schedules

The 590 MeV ring accelerator is scheduled for 33 weeks of high intensity beam production from May 8 to December 22, 2017. A schedule has been worked out which satisfies all beam requests.

As usual, the beam schedules 2017 will be regularly updated and are displayed on the internet:

- <http://www.psi.ch/ltp/facilities> for the general schedule
- <http://www.psi.ch/lmu/beamtime-schedule> for  $\mu$ SR details

## 3. Varia

The next meeting BVR 49 is scheduled for February 12 - 14, 2018. The first day is reserved for detailed reviews as usual. The deadline for beam requests, new proposals and addenda is January 15, 2018. Users are requested to make electronic submissions of their documents.

The dates for the next meeting BVRA-2018 are not fixed yet.

## Attachments

- PSI 590 MeV HE Program 2017 can be found on [http://www.psi.ch/ltp/FacilitiesEN/schedule\\_2017.pdf](http://www.psi.ch/ltp/FacilitiesEN/schedule_2017.pdf)
- BV48 list of PSI HE experiments
- BVRA-2017 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>

# BV48 LIST OF PSI $\pi/\mu$ EXPERIMENTS: BEAM REQUESTS AND ALLOCATIONS 2017

## PSI 590 MeV Program 2017

Last update: Feb 8th, 2017, S. Ritt <stefan.ritt@psi.ch>  
[http://www.psi.ch/ftp/FacilitiesEN/schedule\\_2017.pdf](http://www.psi.ch/ftp/FacilitiesEN/schedule_2017.pdf)

			May	June	July	August	September	October	November	December																										
Week number			19	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	52
PSP			Availability																																	
PiM3	MuSR (GPS&LTF)		Amato (coord.)																																	
PiE3	MuSR high field		Scheuermann (coord.)																																	
MuE1	MuSR (GPD)		Amato (coord.)																																	
MuE4	MuSR (LEM)		Prokscha (coord.)																																	
PiE1-1	MuSR (Dolly)		Amato (coord.)																																	
	Muonium	5203.32730.001	Knecht																																	
PiE1-2	R-16-01.1 muX	5203.32730.001	Knecht																																	
	R-16-02.1 HyperMu	5201.32030.006	Antognini																																	
	R-14-02.1 MuCool	5203.32730.001	Antognini																																	
	2S-1S	5203.85763.010	Wauters																																	
	Irradiation	5201.32004.802	Hajdes																																	
PiE3	R-99-05.2 MEG	5201.32030.001	Mori																																	
	R-12-03.1 Mu3E	5201.32030.002	Schoening																																	
	R-16-02.1 HyperMu	5201.32030.006	Antognini																																	
UCN	R-05-03.1 nEDM		Kirch																																	
PiM1	R-12-03.1 Mu3E	5203.85763.010	Schoening																																	
	R-12-01.2 MUSE	5203.85763.010	Gilman																																	
	Praktikum	5203.85763.010	Grab																																	
	Praktikum	5203.85763.010	Steinkamp																																	
	CMS Diamond Detectors	5203.85763.010	Hits																																	
	DC cluster counting	5203.85763.010	Renga																																	
	Micro Rwell	5203.85763.010	Bencivenni																																	
	Irradiation	5203.85763.010	Hajdes																																	
Spin-rotator			Availability																																	
	Start (Monday)		8/5/17	15/5/17	22/5/17	29/5/17	5/6/17	12/6/17	19/6/17	26/6/17	3/7/17	10/7/17	17/7/17	24/7/17	31/7/17	7/8/17	14/8/17	21/8/17	28/8/17	4/9/17	11/9/17	18/9/17	25/9/17	2/10/17	9/10/17	16/10/17	23/10/17	30/10/17	6/11/17	13/11/17	20/11/17	27/11/17	4/12/17	11/12/17	18/12/17	25/12/17
	End (Sunday)		14/5/17	21/5/17	28/5/17	4/6/17	11/6/17	18/6/17	25/6/17	2/7/17	9/7/17	16/7/17	23/7/17	30/7/17	6/8/17	13/8/17	20/8/17	27/8/17	3/9/17	10/9/17	17/9/17	24/9/17	1/10/17	8/10/17	15/10/17	22/10/17	29/10/17	5/11/17	12/11/17	19/11/17	26/11/17	3/12/17	10/12/17	17/12/17	24/12/17	31/12/17

## BV48 LIST OF PSI $\pi$ / $\mu$ EXPERIMENTS: BEAM REQUESTS AND ALLOCATIONS 2017

### 1. New Proposals

Proposal No.	Spokesmen	Email	Experiment	Beam request	Area	Referees

### 2. Progress Reports and Beam Requests

Proposal No.	Spokesmen	Email	Experiment	Beam request	Area	Referees
R-99-05.2	T. Mori A. Baldini	mori@icepp.s.u-tokyo.ac.jp baldini@pi.infn.it	Search for $\mu^+ \rightarrow e+\gamma$ ( <b>MEG II</b> collaboration)  Detector tests	27 weeks	$\pi$ E5	approved
R-05-03.1	K.Kirch S. Roccia	klaus.kirch@psi.ch stephanie.roccia@csnsm.in2p3.fr	Measurement of the Neutron Electronic Dipole Moment <b>nEDM</b>	all available UCN beam time	UCN	approved
R-12-01.2	R. Gilman	rgilman@physics.rutgers.edu	Studying the Proton "Radius" Puzzle with $\mu$ p-p Elastic Scattering ( <b>MUSE</b> collaboration)	3 weeks + 12 weeks	$\pi$ M1	conditionally approved
R-12-03.1	A. Schoening St. Ritt	andre.schoening@desy.de stefan.ritt@psi.ch	Search for the Decay $\mu \rightarrow eee$ ( <b>Mu3e</b> collaboration)	4 weeks + 3 weeks tests	$\pi$ E5 $\pi$ M1	approved

**BV48 LIST OF PSI  $\pi$  / $\mu$  EXPERIMENTS: BEAM REQUESTS AND ALLOCATIONS 2017**

R-14-02.1	A. Antognini	aldo@phys.ethz.ch	MuCool	4 weeks	$\pi$ E1-1	approved
R-16-01.1	A. Knecht	a.knecht@psi.ch	Measurement of the charge radius of radium ( $\mu$ X)	2 weeks	$\pi$ E1-2	approved
R-16-02.1	A. Antognini	aldo@phys.ethz.ch	Hyperfine Splitting in Muonic Hydrogen and Helium	2 weeks 2 weeks	$\pi$ E5 $\pi$ E1-1	approved
-	F. Wauters	fwauters@uni-mainz.de	2s-1s	2 weeks	$\pi$ E1-2	approved
-	A. Knecht	a.knecht@psi.ch	Test of muonium production	2 weeks	$\pi$ E1-1	approved

## BVRA-2076 list of Continued $\mu$ SR experiments

- 20161748 High-pressure  $\mu$ SR study of superconductivity and Eu<sup>2+</sup>-antiferromagnetism in Ca-substituted EuFe<sub>2</sub>As<sub>2</sub>  
Lan M Tran, Inst. of Low Temperature and Structure Research of the Polish Academy of Sciences  
Refused, 0 days GPD
- 20161753 The relations between doping, structure, and the super-exchange interaction; magnetic measurements on the Lanthanide series LnBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>  
Amit Keren, The Israel Inst. of Technology - Technion  
Approved, 3 days GPS
- 20161762 Magnetic phases in the double perovskites La<sub>2-x</sub>Ca<sub>x</sub>CoIrO<sub>6</sub> (x=0.2,0.8) and La<sub>1.5</sub>A<sub>0.5</sub>CoMnO<sub>6</sub> (A=Ca,Sr,Ba)  
Jochen Litterst, Techn. Univ. Braunschweig  
Approved, 3 days GPS
- 20161765 Cycloidal, short range ordered cycloidal, and ferromagnetic phases in the lacunar spinels GaV<sub>4</sub>S<sub>8</sub>, GaV<sub>4</sub>Se<sub>8</sub>, and GaMo<sub>4</sub>S<sub>8</sub>  
Jochen Litterst, Techn. Univ. Braunschweig  
Refused, 0 days GPS
- 20161776 Proximity-Induced Antiferromagnetic Correlations in SmTiO<sub>3</sub>/SrTiO<sub>3</sub>/SmTiO<sub>3</sub> quantum well structures  
Michael J Graf, Boston College  
Approved, 4 days LEM
- 20161798 Probing of the low-temperature Nd ordering in the hole-doped pyrochlore iridates (Nd<sub>1-x</sub>Ca<sub>x</sub>)<sub>2</sub>Ir<sub>2</sub>O<sub>7</sub> by means of  $\mu$ SR study  
Retno Asih, RIKEN  
Approved, 3 days Dolly
- 20161927 Probing of the low-temperature Nd ordering in the hole-doped pyrochlore iridates (Nd<sub>1-x</sub>Ca<sub>x</sub>)<sub>2</sub>Ir<sub>2</sub>O<sub>7</sub> by means of  $\mu$ SR study  
Retno Asih, RIKEN  
Refused, 0 days GPS
- 20161802 Two-dimensional triangular lattice in cluster magnets, Li<sub>2</sub>ScMo<sub>3</sub>O<sub>8</sub> & Li<sub>2</sub>InMo<sub>3</sub>O<sub>8</sub>, PART II  
Jun Sugiyama, Toyota Central R&D Labs., Inc.  
Approved, 8 days HAL-9500
- 20161934 Two-dimensional triangular lattice in cluster magnets, Li<sub>2</sub>ScMo<sub>3</sub>O<sub>8</sub> & Li<sub>2</sub>InMo<sub>3</sub>O<sub>8</sub>, PART II  
Jun Sugiyama, Toyota Central R&D Labs., Inc.  
Approved, 1 days GPS
- 20161808 Antiferromagnetic ordering in multi-orbital molecular systems [Au(tmdt)<sub>2</sub>] and [Cu(tmdt)<sub>2</sub>]  
Rina Takagi, RIKEN  
Approved, 3 days Dolly



## BV48 LIST OF PSI $\pi$ / $\mu$ EXPERIMENTS: BEAM REQUESTS AND ALLOCATIONS 2017

- 20161809 Antiferromagnetic ordering in multi-orbital molecular systems [Au(tmdt)<sub>2</sub>] and [Cu(tmdt)<sub>2</sub>]  
Rina Takagi, RIKEN  
Refused, 0 days GPS
- 20161811 Re-investigation of the magnetic phase diagram of Na<sub>x</sub>CoO<sub>2</sub> using samples prepared by an electrochemical reaction: PART III  
Yasmine Sassa, Univ. Uppsala  
Approved, 3 days GPS
- 20161819 High field  $\mu$ SR line-shape spectroscopy of the vortex lattice structure in BSCCO single crystals  
Ariel Maniv, Nuclear Research Centre-Negev  
Refused, 0 days HAL-9500
- 20161835 Measuring the Full Vortex Phase Diagram of a Layered Superconductor  
Francis L Pratt, Rutherford Appleton Lab.  
Approved, 8 days HAL-9500
- 20161840 Paramagnetic Meissner effect, Vortex Formation and Spin Triplets in Superconducting-Molecular Interfaces  
Oscar Cespedes, Univ. of Leeds  
Approved, 3 days LEM
- 20161841 Probing the spiral magnetic order in multiferroic YBaCuFeO<sub>5</sub> thin films via low-energy  $\mu$ SR  
Toni Shiroka, ETH Zuerich  
Approved, 3 days LEM
- 20161842 A Search for the Vector Spin Chiral State in Rb<sub>2</sub>Cu<sub>2</sub>Mo<sub>3</sub>O<sub>12</sub>.  
Nicole M Reynolds, Paul Scherrer Institut  
Approved, 3 days LTF
- 20161871 A Search for the Vector Spin Chiral State in Rb<sub>2</sub>Cu<sub>2</sub>Mo<sub>3</sub>O<sub>12</sub>.  
Nicole M Reynolds, Paul Scherrer Institut  
Approved, 3 days GPS
- 20161844 Magnetism of the Rare-Earth Nickelates  
Lukas Korosec, ETH Zuerich  
Approved, 3 days GPS
- 20161848 Anomalous flux expulsion in superconductor/ferromagnet heterostructures  
Machiel G Flokstra, Univ. of St. Andrews  
Approved, 8 days LEM
- 20161850 Probing the Proximity Effect in Normal Metal Sr<sub>2</sub>RuO<sub>4</sub>/Superconductor YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> Heterostructures  
Angelo Di Bernardo, Univ. of Cambridge  
Approved, 5 days LEM

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- 20161851 MuSR Study of the Chiral Superconductivity in the Honeycomb-Lattice Superconducting Single Crystals  
Tadashi Adachi, Sophia Univ.  
Refused, 0 days LTF
- 20161861 Strong interfacial magnetic fields in magnetoelectric/oxide bilayers.  
Michael Fechner, Max Planck Inst. für Struktur und Dynamik der Materie  
Approved, 6 days LEM
- 20161874 Relation between conductivity and molecular dynamics of surface and interface in polythiophene  
Soshi Takeshita, High Energy Acc. Research Org. (KEK)  
Refused, 0 days LEM
- 20161875 Investigating the Kasteleyn transition in a dipolar Ising triangular metamaterial  
Naemi Leo, Paul Scherrer Institut  
Refused, 0 days LEM
- 20161877 Relaxor ferromagnetic state in competition with spin glass behaviour  
Stephen J Blundell, Univ. of Oxford  
Approved, 3 days GPS
- 20161883 Imaging the internal field distribution of Dy<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub>  
Stephen J Blundell, Univ. of Oxford  
Approved, 4 days HAL-9500
- 20161886 The phase diagram and the order parameter symmetry of the time reversal symmetry breaking superconductor Ba<sub>1-x</sub>K<sub>x</sub>Fe<sub>2</sub>As<sub>2</sub>  
Dr. Vadim Grinenko, Technische Univ. Dresden  
Approved, 5 days GPS
- 20161891 Single crystal study of the layered honeycomb magnet alpha-RuCl<sub>3</sub> under mechanical deformation  
Stephen J Blundell, Univ. of Oxford  
Approved, 2 days GPS
- 20161898 Structure of a transverse magnetic field near the surface of type-II superconductors.  
Vladimir Kozhevnikov, Tulsa Community College  
Refused, 0 days LEM
- 20161926 Investigation of charge carrier profiles in GaAs-based quantum well structures by means of low-energy muSR  
Thomas Prokscha, Paul Scherrer Institut  
Approved, 5 days LEM
- 20161930 High-pressure  $\mu$ SR study of an oxygen-free iron-based superconductor  
Toni Shiroka, ETH Zuerich  
Approved, 7 days GPD

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- 20161744 High-pressure  $\mu$ SR study of an oxygen-free iron-based superconductor  
Toni Shiroka, ETH Zuerich  
Approved, 1 days GPS
- 20161932 Microscopic investigation of the magnetic field and pressure-induced quantum phase transition in CsFeCl<sub>3</sub>  
Zurab Shermadini, Paul Scherrer Institut  
Approved, 8 days GPD
- 20161936 Microscopic investigation of the magnetic field and pressure-induced quantum phase transition in CsFeCl<sub>3</sub>  
Zurab Shermadini, Paul Scherrer Institut  
Approved, 4 days Dolly
- 20161935 Microscopic investigation of the magnetic field and pressure-induced quantum phase transition in CsFeCl<sub>3</sub>  
Zurab Shermadini, Paul Scherrer Institut  
Approved, 8 days HAL-9500
- 20161933 Magnetic order in high-T<sub>c</sub> Cr<sub>x</sub>Sb<sub>2-x</sub>Te<sub>3</sub> topological insulator thin films  
Peter J Baker, Rutherford Appleton Lab.  
Approved, 5 days LEM
- 20161938 The relation between nematicity, quasi-static magnetism and superconductivity in FeSe<sub>1-x</sub>S<sub>x</sub> single crystals  
Vadim Grinenko, Technische Univ. Dresden  
Approved, 4 days HAL-9500
- 20161949 The relation between nematicity, quasi-static magnetism and superconductivity in FeSe<sub>1-x</sub>S<sub>x</sub> single crystals  
Vadim Grinenko, Technische Univ. Dresden  
Approved, 3 days Dolly
- 20161951 Spin dynamics of integer-spin antiferromagnetic molecular rings investigated by MuSR  
Manuel Mariani, Univ. di Ancona  
Approved, 3 days GPS