

Special Group Seminar “Materials Group”

June 24th, 10:30 in OFLG/402

Advances in perovskite-based photovoltaics

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The perovskite solar cell is a new and exciting breed of photovoltaic with photo-conversion efficiencies verified as high as 20.1% [NREL certified]. This nascent technology is rapidly becoming competitive with conventional solar technologies (with over 20 years of development). However, fundamental questions regarding the precise elemental make-up of this hybrid material and how to control its morphology at the micro-,nanoscale remain unanswered. Addressing such problems will influence the design rules for future photovoltaic development and guide efforts towards commercialisation.

In this seminar I will give a brief history of photovoltaics based on hybrid perovskites and outline recent developments.