



**Abstract**

**Muon-spin rotation/relaxation: A tool to study magnetic and superconducting phenomena**

Rustem Khasanov, Paul Scherrer Institut, Villigen

The muon-spin rotation/relaxation is the relatively new technique which is widely used now to study magnetism and superconductivity in various classes of materials. In this talk I will give a brief introduction to the technique and give few examples which includes: (i) Pressure induced tuning of magnetic and superconducting phase volumes in F-doped LaFeAsO; (ii) Magnetic phase separation in URu<sub>2</sub>Si<sub>2</sub>; (iii) Microscopic coexistence of superconductivity and magnetism in FeSe<sub>1-x</sub>Tex; (iv) Evolution of the two-gap behavior in FeSe<sub>1-x</sub>, etc.