Departmental Seminar

*Department of Chemistry*

**Monday, November 4, 2019**

**Time 15:00**

**Bldg. 51 Room 015**

**Prof. Philipp Selenko**

*The Department of Biological Regulation, Weizmann Institute of Science*

**Looking at proteins in live cells with atomic resolution: From Science Fiction to Science Reality**

Recent advances in Nuclear Magnetic Resonance (NMR) technologies can be harnessed to study biomolecules at atom-level resolution directly in cells. In my seminar, I introduce the concept of multidimensional in-cell NMR spectroscopy and outline possible applications. Specifically, I discuss ongoing efforts in my group at Weizmann that range from real-time NMR studies of post-translational protein modifications (PTMs) in response to cell signalling, to structural analyses of amyloid formation upon cell stress and ageing.