Announcement

**Selected topics of ultracold Few-Body Physics**
Prof. Jose D’Incao, Dr. Jinglun Li

**Description**

Ultracold few-body physics is modern area of research where recent advances in experiment and theory allow for deep insights into otherwise complex few-body dynamics.

**Topics will include**

1 – The Faddeev equations

2 – Trimer bound states
   - Resonance states, lifetimes
   - Spectroscopy of trimers
   - Optical and rf-transitions in trimers
   - Relaxation in trimers (e.g. spin flip from a spin quartet surface to a spin doublet surface)

3- Three-body recombination
   - Advances in the modelling of coupled channel calculations with various spin channels
   - The energy propensity rule
   - The spin propensity rule
   - Channel functions
   - The role of avoided crossings

4- Conical intersections of potential energy surfaces

**Schedule**

Used The lecture will take place in room 45. 2. 304 at the Institute of Quantum matter at Universtät West.

- Tuesday, October 18, 2pm to 4pm
- Friday, October 21, 11am to 1pm
- Tuesday, October 25, 2pm to 4pm
- Fridays, October 28, 1pm to 3pm,
- Thursday, November 3, 2pm – 4pm
- Friday, November 4, 11am to 1pm

**Lecturer**

Prof. Dr. Jose D’Incao (Visiting Professor)

Theoretical atomic physicist from JILA, NIST and Department of Physics, University of Colorado at Boulder. His specialization is on few-body systems and multi-particle dynamics in ultracold atomic gases [http://jila.colorado.edu/~jpdincao/Site/Welcome.html](http://jila.colorado.edu/~jpdincao/Site/Welcome.html).

Dr. Jinglun Li is a postdocs at the University of Ulm