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.

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