

Dear All,

coming Wednesday, March 28, our guest Florian Schreck, University of Amsterdam, will give a talk entitled

“Towards a continuous atom laser and ultracold RbSr”
(see abstract below)

Location: SR 1, ICT-Gebäude

Time: 11.00 s.t.

Everybody is welcome to join!

Towards a continuous atom laser and ultracold RbSr:
A steady-state Sr sample close to quantum degeneracy
&
Rb-Sr magnetic Feshbach resonances

Ultracold atoms are useful for precision measurement and the study of quantum many-body physics. We pursue two experiments contributing to these research lines. The first experiment attempts to create a continuous atom laser, exploiting the availability of broad and narrow laser cooling transitions in Sr. I'll discuss our strategy and show how we create a steady-state Sr sample close to quantum degeneracy as intermediate step towards our goal. The second experiment pursues the creation of ultracold RbSr ground-state molecules, which have interesting properties for designing many-body systems. I'll discuss magnetic Feshbach resonances in Rb-Sr mixtures, which exist despite the lack of an electronic magnetic moment in Sr and which are promising for magneto-association of weakly-bound RbSr molecules.

Kind regards,
Christine Götsch



Universität Innsbruck
Institut für Experimentalphysik

Christine Götsch-Obmascher
Administrative Assistentin
Univ.-Prof. Dr. Rudolf Grimm

Technikerstraße 25, ZiNr. 4/21, 6020 Innsbruck

Telefon +43 512 507 52411
Fax +43 512 507 52499
E-Mail christine.goetsch@uibk.ac.at
<http://www.ultracold.at>