

**Tuesday, August 18, 14.15**

**Place: 1525-323**

**Molecular physics seminar**

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**Probing molecular ionization by fast ions: interference ( $H_2$ ) and collectivity ( $C_{60}$ )**

In recent years, Young type interference effect has been observed in ionization of  $H_2$ , although it was predicted many years back. The oscillations in electron spectrum due to this process are observed in fast-ion collisions. In addition, we have also used the electron spectroscopy (and recoil ions) to investigate the collective excitation in free  $C_{60}$ . The electron peak due to the plasmon resonance is clearly identified and its angular distributions indicate the possible polarization of the giant dipole oscillation along the direction of the projectile propagation. A small overview of accelerator based atomic physics will be given.

Jens Ulrik Andersen and Steen Brøndsted