BENEFICIARY OF MEDEA

## Aarhus University

SCIENTISTS IN CHARGE:

- Prof. Dr. Henrik Stapelfeldt
- Prof. Dr. Lars Bojer Madsen

SCIENTIFIC EXPERTISE \& FACILITIES:

- Femtosecond laser laboratoty
- Alignment and orientation techniques
- Cold molecular beams and He droplets
- Theory of strong-field and attosecond physics


## EARLY STAGE RESEARCHER

## James Pickering

## PROJECT: Ultrafast Dynamics of Molecules Embedded in He Nanodroplets

The research program focus on the investigation of dynamics of molecules embedded in in superfluid He nanodroplets. Particularly, excited state photochemistry of molecules excited by visible or ultraviolet fs pulses. The strong dissipative coupling of the excited molecule to the He environment facilitates a unique opportunity to study the influence of vibrational relaxation on the excited state dynamics. The project will be conducted in collaboration with the group of Dr. Marcel Mudrich (University of Freiburg?) and with Dr. Thomas Binhammer (Venteon).

## EARLY STAGE RESEARCHER

## Qingli Jing

PROJECT: Molecular Electron Dynamiscs investigated by Intense fields and Attosecond Pulses
The research focuses on developing new theoretical models for a complete understanding of diatomic molecules with attosecond XUV-IR pump-probe spectroscopy. In particular, new theory models with predictive power for the analysis of dissociate ionization in attosecond XUV-IR pump-probe spectroscopy will be explored.

Parts of the project will be conducted in collaboration with the support of Dr. Alicia Palacios (MAD) Dr. Federico Canova (AMPL).


