

# CAMT Seminar

“Current research at the Institute of Plasma and Atomic Physics at Ruhr University Bochum”

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Date: September 22, 2022 (Thursday) 11:00-12:00

Location: Main Conference Room (1st floor), Bldg. A12

Center for Atomic and Molecular Technologies (CAMT)

(A12 棟 1 階会議室) & Webex Link (hybrid)

## Abstract

Recent research at the Institute for Plasma and Atomic Physics at Ruhr University Bochum (RUB) is introduced. Particularly, four research topics are discussed in more detail. These topics range from plasmas at low pressure ( $p < 1\text{Pa}$ ) to atmospheric pressures and include experimental as well as theoretical aspects: 1) The inductively coupled array (INCA) discharge, 2) Describing local and non-local electron heating described by the Fokker-Planck equation, 3) Enhanced dynamic range for ion retarding field energy analyzers (RFEA), 4) ns-pulsed atmospheric pressure discharges (jets) in nitrogen and CO<sub>2</sub> - the latter topic includes also a wide range of different diagnostics (EFISH, CARS, QCLAS, OES, V/I), PIC/MCC simulation, and modelling. The intention is to provide an overview and not an in-depth discussion of these topics. However, questions and comments are welcome at any time during my present stay at Osaka University.

(Host: Satoshi Hamaguchi Ext:7913)