



UNIVERSITÀ
DEGLI STUDI
DI TRIESTE



DSCF

Dipartimento di
**Scienze Chimiche
e Farmaceutiche**

AVVISO DI CONFERENZA

Il giorno **MARTEDI' 14 LUGLIO 2026**,
alle ore **15:00**, presso l'aula **INFORMATICA (IV piano)**
del DIPARTIMENTO DI SCIENZE CHIMICHE E
FARMACEUTICHE,

Università di Trieste, Edificio C11, Via Giorgieri 1

Il Prof. André Laestadius

Dell'Università di Oslo, terrà una conferenza dal titolo:

**Moreau-Yosida Regularization for Density-Functional
Theory**

Tutti gli interessati sono cordialmente invitati.

Il Direttore del Dipartimento di Scienze Chimiche e Farmaceutiche

Prof. Paolo Tecilla

Moreau-Yosida Regularization for Density-Functional Theory

André Laestadius

Oslo University

Standard density-functional theory faces a fundamental mathematical challenge: the universal functional is discontinuous on the natural non-reflexive Banach density space. In this talk, I will elaborate on a non-reflexive formulation of Moreau-Yosida regularization that resolves this issue. This problem is interesting in its own right but is also motivated by approximation schemes that require a continuous density functional, such as neural network approximations. It also has applications for Kohn-Sham iterations, both for the forward and the inverse scheme.

Short CV:

Born in Sweden, Andre holds a PhD in Applied Mathematics from KTH Royal Institute of Technology. He is currently the PI of the ERC Starting Grant REGAL. He is associate professor at the department of computer science at OsloMet and adjunct associate professor at the department of chemistry at University of Oslo. His research centers on mathematical quantum chemistry, particularly density-functional theory and coupled-cluster methods. His current work focuses on Moreau-Yosida regularization in density-functional theory.