



**UNIVERSITÀ
DI PARMA**

DIPARTIMENTO DI SCIENZE MATEMATICHE, FISICHE E INFORMATICHE

<http://smfi.unipr.it>

Seminari di Fisica Matematica

Prof. **Milana Pavić-Čolić** (University of Novi Sad)

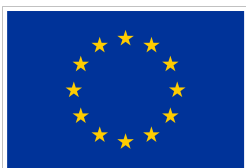
Mercoledì 13 marzo 2024 ore 12:00

Aula F, Plesso di Matematica

On the physical interpretation of the Boltzmann polyatomic operator

Abstract: The aim of this lecture is to present some recent results on the physical intuition of the polyatomic Boltzmann operator in the continuous setting for the internal energy. The idea is to evaluate Boltzmann operator and extract models for transport coefficients. These models contain parameters of the collision kernel. We discuss possibility of matching those parameters with the experimental data, first for the collision kernel used in the rigorous analysis endowed with frozen collisions, and then for the extended model of the collision kernel. A possible extension to the mixture of Eulerian fluids will be discussed as well.

Organizzatori: Andrea Bondesan, Maria Groppi



**Funded by
the European Union**

MesoCroMo - Project n. 101110920