



UNIVERSITÀ DI PARMA

DIPARTIMENTO DI SCIENZE MATEMATICHE, FISICHE E INFORMATICHE

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Seminario di Fisica Matematica

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***Compactness property of the linearized Boltzmann operator
for polyatomic molecules undergoing resonant collisions***

Lunedì 17 ottobre 2022, ore 09:30

Aula F, Plesso di Matematica/Informatica

Tutti gli interessati sono invitati a partecipare

Organizzatori: prof.ssa Marzia Bisi e prof. Giorgio Martalò

Abstract: We investigate a compactness property of the linearized Boltzmann operator in the context of a polyatomic gas whose molecules undergo resonant collisions. The peculiar structure of resonant collision rules allows to tensorize the problem into a velocity-related one, neighbouring the monatomic case, and an internal energy-related one. We also propose a geometric variant of Grad's proof of the same compactness property in the monatomic case.