



Hiba Hammedi

Doctor in Mathematics

Education

- 2013–2016 **PhD degree**, *Toulon University, France, very honorable.*
Doctoral contract at the University of Toulon in the center of theoretical physics
- 2010–2012 **Master degree**, *Higher Institute of Applied Mathematics and Computer Science , Kairouan, Grade.*
Description
- 2006–2009 **Licence degree**, *Higher Institute of Applied Mathematics and Computer Science , Kairouan, Grade.*
Description

Master thesis

- Title *Spectral analysis for twisted waveguides*
- Supervisors Prof. Briet Philippe
- Description In this thesis we study the spectral properties of perturbed 3D quantum waveguides (tubes). At first, we study the Laplace operator with Dirichlet boundary conditions defined in a twisted tube. Then we focus on the study of the Laplacian with Dirichlet conditions everywhere on the boundary of the tube except on a bounded part where we consider the Neumann conditions.

Experience

- 2016–2017 **contractual assistant**, *Kairouan University, ISSAT, Kairouan.*
Teaching Mathematics for first year students

- Mathematical computing methods using MATLAB ;
- Algebra

Scientific works

- 2016 **P. Briet and H. Hammedi**, *Twisted waveguide with a Neumann window*, to appear in functional Analysis and Operator theory for quantum Physics, Editors: J. Dittrich, H. Kovarik and A. Laptev, EMS Publishing House, EMS Series of congress Reports (ECR)
- 2015 **P. Briet, H. Hammedi and D. Krejcirik**, *Hardy inequalities in globally twisted waveguides*, Letters in Mathematical Physics

Languages

Arabic	Native language	<i>very fluent</i>
French	Advanced level	<i>fluent</i>
English	Advanced level	<i>fluent, TOEIC score:890</i>
Spanish	Basic	<i>Still learning</i>

Computer skills

Programming	Matlab, Matematica	Good level
Other programs	Latex, Microsoft world, PowerPoint	Good level and getting even better

Interests

spectral theory	New results
Wave guides	physical aspects and developments
art	Dadaism
poetry	English and Arabic poems