

## SEMINAR OF ANALYSIS

Friday, November 8, 2024 - Room: MA B1 11 at 2.15 pm

**Prof. Staffilani Gigliola**

(Massachusetts Institute of Technology, USA)

will present a seminar entitled:

« **A curious phenomenon in wave turbulence theory** »

Abstract:

In this talk we will use the periodic cubic nonlinear Schrödinger equation to present some estimates of the long time dynamics of the energy spectrum, a fundamental object in the study of wave turbulence theory. Going back to Bourgain, one possible way to conduct the analysis is to look at the growth of high Sobolev norms. It turns out that this growth is sensitive to the nature of the space periodicity of the system. I will present a combination of old and very recent results in this direction.

Lausanne, October 3, 2024

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Seminars are announced on the Mathematics Section website: : <http://memento.epfl.ch/maths/>