

# SEMINÁRIO

## LÓGICA MATEMÁTICA

**11 de outubro | 16h00 | sala 6.2.33**

### Foundational aspects of singular integrals and divergent series – Part 1

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**Abstract:**

The first part of the title of this talk is taken from a paper by O. Costin and H. Friedman that will be the guiding line of the programmed two talks. In the first talk I will review some basic information about divergent series and singular integrals, their interpretation and use. I will also state two results by Costin and Friedman, one positive and the other negative, on the existence of anti-derivative operators that satisfy the property that if two functions are equal in a neighbourhood of a singularity then their anti-derivates are also equal in a neighbourhood of the singularity. This is meant to be an informal seminar and I will focus on concrete examples and ideas and not on proofs. Also, most of the results presented will be of a general culture nature.