Boğaziçi
MATH COLLOQUIUM

An Inverse Problem in Fluorescence Microscopy

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Abstract:

In this talk we will start by presenting a brief description of what is a mathematical inverse problems. We will then describe the particular case of the biomedical imaging technique of fluorescence microscopy, and the issue we want to tackle in light-sheet fluorescence microscopy. We will proceed to present the mathematical model we propose for this setting and an injectivity result for the corresponding measurement operator. We will conclude by showing some numerical experiments that explore the validity and improvements of our approach.

The talk is planned to be a general talk for an audience with mathematical and/or biomedical imaging interests.

Date : Wednesday, November 6, 2019
Time: 13:30
Place: TB 130, Boğaziçi University