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Convexification Numerical Method for a Coefficient Inverse Problem for the Riemannian Radiative Transfer Equation

by

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Date: 17 May 2023 (Wednesday)
Time: 11:00am – 12:00noon

ABSTRACT

The convexification method of the presenter is the single numerical method with the global convergence property for coefficient inverse problems with non-overdetermined data. It is applicable to a broad class of Coefficient Inverse Problems, The key is the Carleman Weight Function, which is involved in the resulting cost functional. We will present this method for a Coefficient Inverse Problem for the radiative transport equation (co-authors Professor Jingzhi Li and Doctor Zhipeng Zhang). Next, we will present both Holder and Lipschitz stability estimates for a Coefficient Inverse Problem for the parabolic equation with the final overdetermination. Finally, we will present Lipschitz stability estimate for a problem of Mean Field Games. If time will allow, then we will discuss other results, which we have recently obtained for other problems of mean field games, see five most recent preprints at <https://arxiv.org/search/?query=Klibanov&searchtype=all&source=header>

Register in advance for this talk:

<https://cityu.zoom.us/join/7212764528>

[Zoom link will be provided via email after registration.]

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