

Professor Indra Ray completes 'Mediation in Environmental Games'

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Professor Indra Ray (</staff/profiles/business/ray-indrjit.aspx>) has just completed a project titled “**Mediation in Environmental Games**” funded by the **British Academy**. He has collaborated with Professor Herve Moulin from Rice University (Houston, Texas) and a PhD scholar Sonali Sen Gupta, from Birmingham (currently at Lancaster University) to work on this funded project. The project analyses the polluting emission choices made by firms (or, even countries) as a game and considers the effect of mediation in such games. The work however considers a general model of a duopoly that includes many other economic and social problems.

Professor Ray and his collaborators have used a specific solution concept called the “coarse correlated equilibrium” (introduced originally by Moulin himself in his earlier work with J. P. Vial) that can be interpreted as a solicitor who the agents (firms or countries) involved in the game listen to and commit to the solicitor's chosen actions in equilibrium. This recent work has proved for specific quadratic models (such as the emission game), the usual (Nash) equilibrium outcome can be improved upon and has characterised the value of the maximum improvement possible.

The first part of the work will appear as an article in the *International Journal of Game Theory*.