"Mathematical Ecology, Evolution and the Social Sciences"

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The last few decades have seen an enhanced partnership between ecologists and social scientists, especially economists, in addressing the environmental challenges facing societies. Not only do ecology and economics, in particular, need each other; but also the challenges they face are similar and can benefit from cross-fertilization. At the core are scaling from the micro- to the macro, the development of appropriate statistical mechanics to facilitate scaling, features underlying the resilience and robustness of systems, the anticipation of critical transitions and regime shifts, and addressing the conflicts of interest between individual agents and the common good through exploration of cooperation, prosociality and collective decision-making. Confronting these issues will be crucial in the coming years for all nations, especially those in South Asia that will suffer in major ways from the consequences of overpopulation, climate change and other environmental threats. (Abstract)

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