

Economics Seminar, Indian Statistical Institute, New Delhi.

SPEAKERS: Amitrajeet A. Batabyal (Rochester Institute of Technology)

TITLE: Human Capital Use, Innovative Activity, and Patent Protection in a Model of Regional Economic Growth

TIME: 11:30-1:00 P.M.

DAY & DATE: Friday, 5th August 2011

PLACE: Seminar Room 2, New Building

Abstract:

We provide the first theoretical analysis of the aggregate effects of the trinity of human capital use, innovative activity, and patent protection, on regional economic growth. In our model, consumers have constant relative risk aversion preferences, there is no human capital growth, and there are three kinds of manufacturing activities involving the production of blueprints for inputs or machines, the inputs or machines themselves, and a single final good for consumption. Our analysis generates four salient results. First, we delineate the balanced growth path (BGP) equilibrium and show that the BGP growth rate depends negatively on the rate λ at which patents expire. Second, we characterize the transitional dynamics in our regional growth model. Third, we determine the value of the patent expiry rate λ that maximizes the equilibrium growth rate of the regional economy under study. Finally, we show that a policy of setting $\lambda = 0$ (offering perpetual patent protection) does not necessarily maximize social welfare in our regional economy at time $t=0$.

<http://www.isid.ac.in/~pu/seminar.html>