

Research Waves

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Abstract :

We study a continuous-time setting in which researchers irreversibly choose between two risky fields of exploration and their individual time of entry. Information production in each field depends on the mass of researchers who have already joined that field. In the bad news case, where a unique 'bandwagon' equilibrium wave emerges, we show that as the priors of the two fields are further apart, the equilibrium wave starts earlier, and it is slower and longer. On the other hand, the good news case is characterized by two sequential fast surges into the two fields. The probability of both fields being explored depends on the researchers' pool size and the efficacy of the information production technology. We compare the equilibrium outcomes to a welfare benchmark that accounts for the societal externalities of research and discuss how alternative incentive structures (such as citations' impact and tenure clock) affect the researchers' specialization decisions.