



Module PMRF-ISSS040/III/2025

Evolutionary Game Theory

Name of the PMRF student

Joy Das Bairagya

Required background of the students taught

Physics, Mathematics





Details of the content of the module

In this course, we explore how can one mathematically model Darwinian evolution using non-linear dynamics and non-equilibrium statistical mechanics. (Book: Evolutionary Dynamics by Martin A. Nowak)

The topics covered in this course include:

1. What is Evolution
2. Evolutionary Games
3. Prisoners of the Dilemma
4. Finite Populations
5. Games in Finite Populations

Stag-hunt Game

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C	 1.0, 1.0	 0.0, 0.71
C'	 0.71, 0.0	 0.71, 0.71

Schedule of the module

Start date: 12/04/2025

End date: 22/04/2025

Time lectures: Everyday (11:30 am to 1:30 pm)

Schedule: Video lectures will be uploaded

Number of lectures: 10

Meeting link : Will be shared later

<https://meet.google.com/mrw-yoxr-rgg>

Contact email

ID: joydasbairagya@gmail.com

Registration link:

<https://forms.gle/dVSESYA5FJKFjFnP7>