***Program in Brief:***

Day 1 - Morning

1. Introduction to systems thinking and properties of complex systems

2. Ecological systems as complex systems

Afternoon

Forming groups, research question identification, casual loop diagrams

Software: STELLA, Kumu

Day 2- Morning

1. Food web structure and complexity
2. Network theory and analysis

Afternoon

Group work: Network model construction and analysis

Software: enaR, MATLAB, Excel

Day 3- Morning

1. From theory to practise: predicting marine food webs functioning under multiple stressor effects.
2. Socio-ecological systems as complex systems. Implications for management and conservation of marine ecosystems

Afternoon

Group work: Model extension to consider policy options, report presentation

Software: Ecopath with Ecosim (EwE)