

A game theoretic approach to medal race sailing

Description: This project is based on two previous master thesis projects: i) a fleet race simulation master thesis by Sebastian Berg, where he wrote an agent based system in Python for a fleet of identical boats, but where each of the boats had a preset starting tactics. The system was run and the tactics distribution were evolved towards an evolutionary stable state. ii) A more recent master thesis project by David Lidström on a similar set up but for two match racing boats. The suggested master project will use the above two described systems as a starting point and will then expand taking into consideration the complex pay off of the standing (ranking) of the top 10 boats prior to the “Medal Race” i.e. the final race of the series. A medal race is the final race and the points count double to clearly define the gold, silver and bronze medal winners. Here the tactics will be a mix between fleet race and match racing. Co-supervisor of this project will be Dr Laura Marimon Giovannetti, that will help with deep insights on the current state of the art sailing.

<https://www.dropbox.com/s/5jq4zixoast5ve5/Berg.mp4?dl=0> (Links to an external site.)

[Further information](#)