Research Seminar

How can computational methods help understand human impacts on marine ecosystems?

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Presented by

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The multiple stressors from human activities - e.g., pollution, climate change, and fishing - are among the most critical threats to ecosystems worldwide. Understanding their cumulative effects is an unresolved challenge in marine science. I present three example studies highlighting the strengths and weaknesses of computational approaches to address this challenge: GIS-based models, machine learning, and ecosystem simulation models. Individually, each approach is limited by the quantity and quality of input data sets. I discuss how they can be combined to make the best of currently available marine data.