

# Virtual workshop on Model Diagnostics in Integrated Stock Assessments

**Jan 31-Feb 3 9am-1pm (PDT [UTC -7])**

There is substantial uncertainty in fishery stock assessments which should be taken into consideration when making management decisions. The uncertainty comes from many sources including sampling error, process variation, model structure uncertainty, and parameter estimation uncertainty. The uncertainty can occur in the understanding of the population dynamic processes or in the understanding of how the population is observed (the observation models). Detecting, measuring, and reducing this uncertainty is a key task of the stock assessment processes and diagnostics are an essential tool. The workshop focusses on defining and automating appropriate diagnostics for fishery stock assessment models and is part of the IATTCs project on improving the risk analysis for tropical tunas in the EPO.

The workshop will comprise presentations by several invited speakers and ample time for discussion. Contributed presentations will be pre-recorded and available for viewing outside the workshop hours with the opportunity of the contributor providing a short 5 minute summary followed by 5 minutes of question time (the allotted time may increase based on the number of contributed presentations).

## **Invited Speakers**

Felipe Carvalho: Review of diagnostics

Carolina Minte-Vera: ASPM and catch-curve analysis

Hui-Hua Lee: R0 profile

Jim Thorson: Residuals and effective sample size

Chris Legault: Retrospective analysis

Laurie Kell: Hind casting

Paul Conn: Bayesian model checking

Andrea Havron and Cole Monnahan: Random effect model validation

Ian Taylor: Diagnostics in Stock Synthesis

Henning Winker: Diagnostics atomization and simulation testing

Andre Punt: Summary

## **Participation**

The workshop is technical in nature and is open to all participants.

As usual, a registration form will be posted on the meeting website to allow for participants to register individually.

## **Arrangements**

The Workshop will be held by videoconference, utilizing the Zoom platform. An invitation will be sent individually to each registered participant.

As indicated above, the Workshop will be held on 31 January 2021 to 3 February 2022. Each session will have a duration of four hours and will start at 9 AM PDT (UTC -7) to finalize around 1 PM PDT (UTC -7).

For the convenience of the participants, a document will be posted on the website with more precise indications on the ways the meeting will be conducted, taking into account the special requirements and limitations of videoconferencing, using as a model the similar documents that were used for previous IATTC meetings by videoconference.

Languages: English.