

**INTER-AMERICAN TROPICAL TUNA COMMISSION**  
**1<sup>st</sup> WORKSHOP ON IMPROVING THE RISK ANALYSIS FOR THE**  
**TROPICAL TUNAS IN THE EPO: MODEL DIAGNOSTICS FOR**  
**INTEGRATED STOCK ASSESSMENTS**

*(by videoconference)*  
31-03 Feb 2022

### **Tentative agenda**

Jan 31-Feb 3 9am-1pm (San Diego time).

#### **Monday**

9:00 Welcome and instructions, Alex Aires-da-Silva and Mark Maunder

9:10 Introduction, Mark Maunder

9:30 The value of diagnostics in stock assessment, Felipe Carvalho

10:30 “and he saith unto them, Follow me, and I will make you fishers of [data]” (i.e., how to sort and weigh data). James Thorson.

11:00 Break

11:15 The Logistic-normal as a tool to diagnose model misspecification? The proposed idea, its comparison to common diagnostics, and some initial considerations. Nicholas Fisch

11:45 Guidelines to validating generalized linear mixed models in Template Model Builder using quantile residuals. Andrea Havron

12:15 Discussion

#### **Tuesday**

9:00 Retrospective analysis as a diagnostic. Chris Legault

9:30 There is a crack in everything, that’s how the light gets in. Hindcasting for model validation and selection. Laurie Kell.

10:00 The Art of Bayesian Model Checking. Paul Conn

10:30 Importance of prior predictive checks in Bayesian stock assessment models. Kyuhan Kim

11:00 Break

11:15 Jim Ianelli and Paul Spencer. Use of posterior predictive intervals in complex statistical age-structured assessment models

11:45 Discussion

### **Wednesday**

9:00 R0 likelihood component profile as a diagnostic tool: thumbs up or thumbs down. Hui-Hua Lee

9:30 Age-structured production model and catch curve analysis diagnostics for integrated models.  
Carolina Minte-Vera

10:00 Empirical selectivity. Carolina Minte-Vera

10:30 Discussion

11:00 Break

11:15 Diagnostics in Stock Synthesis. Ian Taylor

11:45 A guide to using ss3diags for model evaluation, Megumi Oshima

12:15 Discussion

### **Thursday**

9:00 On automating assessment model diagnostics and the need for simulation testing, Henning Winker

10:00 Discussion

10:30 Break

10:45 Diagnostics, yesterday, today and tomorrow. Andre Punt

11:45 Discussion