Preliminary Agenda

Monday

9:00 Welcome (Pamela Mace) and introductions

Coding philosophies, software structure, and underlying language base

9:30 Matthew Supernaw - Engineering Practices for Maintainable Software (60)

10:30 Morning tea

11:00 Corinne Bassin - Enabling Successful Onboarding of Scientific Tools Via Development Best Practices (30)

11:30 Scott Rasmussen – Coding CASAL2 (30)

12:00 Lunch

1:00 Ernesto Jardim - A modular framework for the generic application of fisheries management strategy evaluation. (30)

1:30 Wen-His Yang - Doing Stock Assessment Using ADMB, Stock Synthesis or TMB? A Case Study on the Queensland Saucer Scallop. (30)

2:00 Discussion: Coding philosophies, software structure, and underlying language base (60)

3:00 Afternoon tea

Stock assessment model features

3:30 Momoko Ichinokawa - Stock assessment model in Japan: past to present (15)

3:45 Akira Hayashi - Stock assessment model in Japan: future perspective (15)

4:00 Kota Sawada - Case studies of the local stock assessment in the Northwest Pacific: difficulties in the stock assessment for seamount bottom fisheries (15)

4:15 Shin Fukui - Case studies of the local stock assessment in the Northwest Pacific: application of robust regression in estimating stock-recruitment relationship (15)

4:30 Jemery Day - Stock assessment issues in South Eastern Australia (30)

Tuesday

9:00 Andre Punt - Essential Features of the Next-Gen Integrated Assessment (60)

10:00 Erik Williams - Beaufort Assessment Model (BAM): Lessons Learned From Twenty Years of Software Development (30)

10:30 Morning tea

11:00 Allan Hicks - Needs from a next generation general modelling framework to support the future of stock assessment and MSE at IPHC (30)

11:30 Divya Varkey (presented by Jonathan Babyn) - Hybrid: a modelling framework to sidestep structural uncertainty in models (30)

12:00 Chantel Wetzel - Moving up the assessment ladder: A flexible and integrated approach to modelling data-limited stock assessments (30)

12:30 Lunch

Groups / partitions

1:30 Nick Davies - Partitioning in MULTIFAN-CL in respect of space, tagged populations, species, stocks, and gender – coding implementation and recommendations (60)

2:30 Richard McGarvey - Will age-and-length based modelling permit broader application of the next-generation fishery assessment model? (30)

3:00 Afternoon tea

3:30 Jim Ianelli - Assessment developments including climate enhanced multi-species models from the North Pacific. (30)

4:00 Steve Saul - Are Agent-Based Approaches the Future of Fishery Management? – applying the Poseidon model to the Eastern Pacific Tropical Tuna Fishery (30)

4:30 Discussion: Stock assessment model features 1 (60)

Might run late 5:30

Wednesday

Observation models

9:00 John Feenstra - A framework for multi-year Leslie-Davis depletion modelling and its use as a stock assessment model feature. (30)

9:30 Rich Hillary - Integrating conventional and electronic tagging data into the next generation of stock assessment models (30)

10:00 Hans Skaug - Software for Close-kin Mark-recapture (30)

10:30 Morning tea

11:00 Robin Thomson - Application of Close-Kin Mark-Recapture (30)

11:30 Mark Chambers - Implications of entrainment for fisheries stock assessment (30)

12:00 Lunch

1:00 Jonathan Babyn - A New Approach to Generating Spatial Age-Length Keys based on Using a Gaussian Field Approximation with Support for Physical Barriers (30)

Management quantities

1:30 Rick Methot - Stock Synthesis Completes the Cycle: Assessment - Management Quantities – Projections – MSE / Propagating Variance in Assessment-Linked Projections (60)

2:30 Skyler Sagarese - Management strategy evaluation made operational with Stock Synthesis (30)

3:00 Afternoon tea

3:30 Jeremy McKenzie - The role of simulation modelling in fisheries research: future needs and requirements (30)

4:00 Nathan Vaughan - A decision support tool for incorporating management impacts into stock assessment projections (30)

4:30 Alfonso Perez-Rodriguez - Multispecies modelling: estimation of reference points and assessment of joint HCRs that take into consideration ecological interactions

Thursday

9:00 Steven Berukoff - Toward technical advancement in joint stock assessment and management strategy evaluation (30)

9:30 Ernesto Jardim - Operationalizing model ensembles to provide scientific advice for fisheries management. (30)

Diagnostics

10:00 Felipe Carvalho (presented by Dean Courtney) - A cookbook for using model diagnostics in integrated stock assessments. (30)

10:30 Morning tea

11:00 Discussion: Stock assessment model features 2 (60)

12:00 Lunch

Parameter estimation

1:00 Anders Nielsen – The role of random effects in next-generation stock assessment models (30)

1:30 Brian Stock - The Woods Hole Assessment Model (WHAM): a generalized state-space age-structured stock assessment model that can include environmental effects on population processes (30)

2:00 Noel Cadigan - Approaches for modelling landings and catch age composition information in state-space stock assessment models (30)

2:30 Saang-Yoon Hyun - Size-based and state-space production models for a fish stock assessment (30)

3:00 Afternoon tea

3:30 Craig Marsh - My Biased experience of using the generalised packages CASAL & Casal2 vs standalone ADMB and STAN models for stock assessments. (30)

4:00 Discussion: Stock assessment model features 3 (60)

Friday

User interface and good practices defaults

8:30 Arni Magnusson - The ICES Transparent Assessment Framework

9:00 Bjarki Elvarsson - The RGadget environment: A tidyverse inspired approach to model development work flow (30)

9:30 Ian Taylor - Processing and exploring assessment model output: lessons learned from a decade of work on the r4ss package (30)

10:00 Discussion: User interface and good practices defaults (30)

10:30 Morning tea

Coordination, project planning, hosting, and funding.

11:00 Jennifer Ferreira - Agile Software Development – What is it and do we want it? (30)

11:30 Craig Anslow - Satisfaction, Practices, and Influences in Agile Software Development (30)

12:00 Lunch

1:00 Hilary Oliver - The Cylc Workflow Engine: Sustaining a Collaborative Scientific Software Project (30)

1:30 Johnoel Ancheta – Hosting ADMB (30)

2:00 Yoann Ladroit - Journey of an open source software for fisheries acoustics (30)

2:30 Kelli Johnson - Lessons learned from the ss3sim project on sharing, hosting, and maintaining simulation code (30)

3:00 Afternoon tea

3:30 Discussion: Coordination, project planning, hosting, and funding (60)

4:30 General discussion (30)