**AD Model Builder Workshop: 23 – 27 September 2020**

*Online (Zoom)*

**Day 1 (23 Sept; Wednesday)**

08h30: A: Welcome & Installing TMB

09h00: B: Introduction to TMB

11h00: Coffee Break

11h30: C: Commands and Functions

12h30: Lunch

13h15: C: Commands and Functions (Continued)

14h00: Example application I: Growth curve

15h30: Coffee Break

16h00: D: Various TMB issues

17h30: Close

**Day 2 (24 Sept; Thursday)**

08h30: Example application II: Predation function

10h00: Coffee Break

10h30: E Variance estimation

11h00: Example application III: Modelling time-series of data

12h30: Lunch (Working)

13h30: F: TMB and MCMC

14h15: Coffee Break

15h30: Example application IV: Length-structured model (assessment)

17h30: Close

Homework Example application IV: Length-structured model (assessment; Continued)

**Day 3 (25 Sept; Friday)**

08h30: Homework review

09h30 G: Alternative MCMC algorithms

10h00: H: Use of random effects in assessment

10h30: Coffee Break

11h00: Example application IV: Length-structured model (projection)

12h30: Lunch

13h30: Example application V: Hierarchical model

15h30: Coffee Break

16h00: Discussion / feedback

17h00: Close

**Days 4&5 (Weekend; optional; random effects models)**

Example application VI: State space Schaefer model

Example application VI: Estimation of mortality rates

**Day 6 (28 Sept; Monday)**

11:00: Homework feedback

12:00: Discussion / feedback

13:00: Close