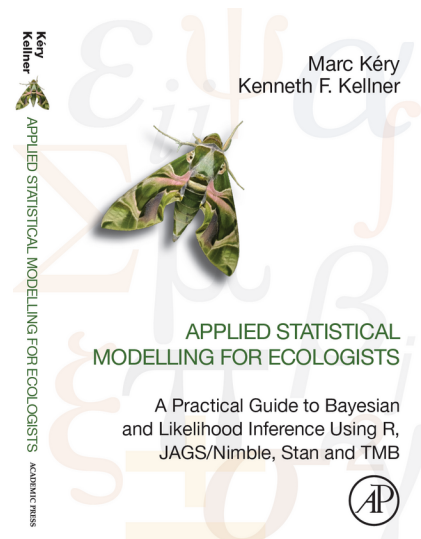
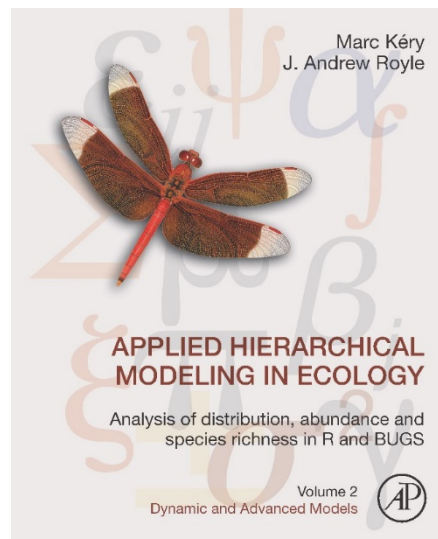
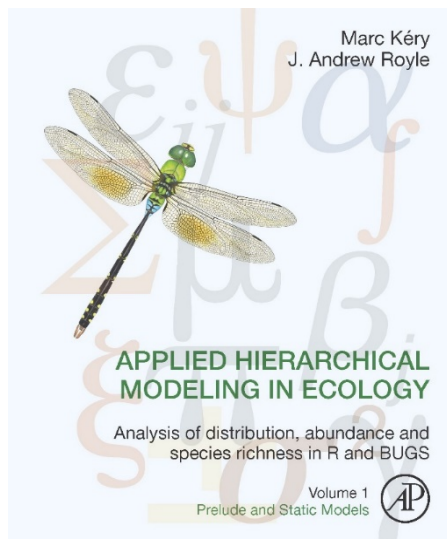


# Applied hierarchical modelling (AHM) for species distribution and abundance

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Workshop at  
Michigan State University  
East Lansing, MI  
22-26 July 2024

# Syllabus

**Morning:** 9–13h, **lunch break around** 13–14h, **afternoon:** 14–17h, possibly extend to 17.30h. --- Incl. **two breaks** of 30' each around 10.30h and 15.30h. Hence, am has 3.5h (210') and pm has 2.5h (150'), for a daily total of 360'.

## Monday

am/pm	Module	Topic	Reading	Duration	Who
am	1	Introduction to Statistical Inference	ASM (2)	180	Marc
pm	2	Static occupancy models	AHM1 (10)	180	Marc

## Tuesday

am/pm	Module	Topic	Reading	Duration	Who
am	3	Dynamic occupancy models	AHM2 (4)	180	Ken
pm	4	Occupancy models with false positives	AHM2 (7)	180	Andy

## Wednesday

am/pm	Module	Topic	Reading	Duration	Who
am	5	Multispecies occupancy models	AHM1 (11), AHM2 (5, 8)	240	Josh/ Ken
pm	6	N-mixture and Royle-Nichols models (RN maybe Tues PM)	AHM1 (6)	120	Ken

## Thursday

am/pm	Module	Topic	Reading	Duration	Who
am	7	Dynamic Nmixture (Dail-Madsen) model	AHM2 (2)	120	Marc
am/pm	8	Occupancy/abundance interaction models		120	Josh/Ken
pm	9	Multinomial N-mixture models	AHM1 (7)	120	Andy

## Friday

am/pm	Module	Topic	Reading	Duration	Who
am	10	Distance sampling	AHM1 (8, 9), AHM2 (11)	180	Andy
pm	11	Integrated models	AHM1 (10), ASM (20)	180	Marc