The International Society for Ecological Modelling Global Conference (ISEM) 2019 Symposium abstract:

The design of open system modelling architectures toward a better understanding of multi-scale interactions in social-ecological systems

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Anthropogenically dominated landscapes bring up multi-faceted socio-ecological systems where no monitoring technique or model platform is sufficient to simulate and assess the often non-linear feedback loops across scales. To advance the development of complex socio-ecological modelling approaches, different knowledge sources, inter- and transdisciplinary concepts along the edge of social, economic as well as ecological sciences have to be combined in open system modelling architectures. For better comprehending land-use changes in terms of positive or negative management impacts, we want to focus on:

- How cross-modelling approaches are able to simulate multi-scale interactions in socio-ecological systems?
- Which dynamics of socio-ecological systems have to be considered with respect to the interactions of their components?
- How multi-spatial and -temporal scale modelling may provide information for a closer research integration into situated decision-making?