(TO BE DONE)

Description of risk	**WP**	**Proposed risk- mitigation measures**
Evolutionary semantic algorithms insufficiently developed: Medium	WP1	Consider more developed genetic programming methods to infer data interactions.
Multilayer metrics accounting for spatiotemporal patterns along many datasets insufficiently developed: Low	WP1	Implementation of more standard complex networks metrics to characterize data knowledge discovery.
Low number of training data available: Medium	WP2	Alternative methods focusing on matrix decomposition methods.
Automated evolutionary-inspired expressions for causal knowledge discovery insufficiently developed: Medium	WP2	Symbolic regression methods to full automation for causal discovery accounting for evolutionary rules.
Eco-evolutionary dynamics of multiple traits in species-rich ecosystems insufficiently developed: Medium	WP3	Mean-field approximations using classical ODE systems and novel universal differential equations for scientific machine learning.
Evolutionary neurobiology-inspired federated networks insufficiently developed: Medium	WP3	Spiking neural network models as alternatives to evolutionary neural biology-inspired algorithms in federated networks.
Cooperative forecasting mixing eco-evolutionary dynamics and neural nets in large scale federated networks insufficiently developed: Medium	WP3	Mix eco-evolutionary dynamics models with less alternative neural nets models working a smaller spatiotemporal scales.

3.3 Consortium as a whole

Core Expertise: The ROBHOOT consortium has been designed to represent the four central project requirements and is, thus, composed of groups with long-standing track records in:

IFICS-EBD-CSIC (ROBHOOT v1.0): Data driven modeling expertise of evolutionary processes including adaptation and coevolution and complex networks patterns.

EAWAG and TARTU (ROBHOOT v2.0): Theoretical and numerical expertise in eco-evolutionary dynamics and deep learning networks in heterogeneous and multidimensional systems.

SRC and UNI GRAZ (ROBHOOT v3.0): Theoretical and numerical expertise in eco-evolutionary dynamics of communities and ecosystems and neuronal-cellular processes including synaptic plasticity, heterogeneity and diversification.

SCITE and IEO: Expertise in data collection for the sustainability of the Seas case study and communication strategy for large and complex projects.

Cross-Expertise: