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.

Tables 3.1a-c). IFISC-CSIC team focuses on multilayer network modularity, community detection and decentralization metrics for pattern detection in data knowledge discovery (D1.2, Tables 3.1a-c). All teams in WP1 will join efforts to merge evolutionary semantic algorithms, multilayer network metrics, automation, reproducibility and visualization to produce the data knowledge discovery graph for the sustainability of the Seas case study (D1.6, Tables 3.1a-c). ROBHOOT v.2.0's team composed by EAWAG, and TARTU ULIKOOL and will merge eco-evolutionary biology-inspired networks to deep learning networks, the "Evolutionary biology-inspired AI algorithms" approach (D2.1 and D2.2, Box 1, Table 3.1a-c and Figure 1, green). The overall goal of this milestone is to connect evolutionary biology mechanisms to deep learning networks to generate a causal knowledge discovery technology to make patterns interpretable (Deliverable D2.2, Section 3.1.2, Table 3.2.a-c and Figure 3). The team for this milestone add inter-module complementarity expertise to ROBHOOT v.1.0's team: Now the skills focus on data-scientists trained in deep learning networks and evolutionary biologists with expertise in evolutionary ecology theory and evolutionary-inspired networks (section 3.1.2 and Figure 1, green). Milestone two generates a causal knowledge discovery for the sustainability of the Seas containing 9 million entries, 1612 species using around 11 sampling methods and more than 15 countries (D2.6, Figures 1, green). Interdisciplinarity in ROBHOOT is achieved not only at the intra-module development stage, but also at the inter-module stage where causal knowledge discovery and evolutionary biology-inspired AI algorithms might form the basis for the interdisciplinarity breakthrough ideas reflected in the highly complementarity skills of the consortium. The first two modules in ROBHOOT contain researchers from Estonia, Spain and Switzerland.