University of Messina, Italy
Department of Mathematical and Computer Sciences,
Physical Sciences and Earth Sciences

Subject: Internship Proposal

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Project Supervisor

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Project details

Title	LPM2N
Detailed description: This internship focuses on developing and evaluating methods for link prediction in multilayer (multiplex) networks, where the same set of nodes interacts through different types of relations or across multiple layers. The student will investigate how to exploit both intra-layer and inter-layer structural information to predict missing or future links, with applications to real-world social, biological, or technological systems.	
Duration (month – max 12)	12
Duration (hours)	75
Open positions	4

Internship Skills

Technical requirements: Background in graph theory, network science, or complex networks (courses or prior projects). Good programming skills in Python, with experience in libraries such as NetworkX, NumPy, and optionally PyTorch or TensorFlow. Basic knowledge of machine learning (supervised learning, evaluation metrics). Ability to read and summarize scientific articles in English.

Other skills	