



## **ONLINE SEMINAR ANNOUNCEMENT**

## The next meeting of the Neuro-Symbolic Seminar (NeSS) will be held on Tuesday March 25th at 4.30 pm

The seminar will be online. Registration is mandatory at the following link: <u>https://unimib.webex.com/weblink/register/rb0151cb02c5aff017fee7bd9af10b9c0</u>

## **ASP Chef Chats with Large Language Models**

## Speaker Mario Alviano University of Calabria

**Abstract**: ASP Chef enriches Answer Set Programming (ASP) with the notion of recipe, that is, a sequence of operations on answer sets. Recipes are designed and executed in modern browsers, and further improve the fast prototyping capabilities of ASP. We recently introduced new operations designed to integrate Large Language Models (LLMs) in recipe, with the aim of combining the reasoning strength of ASP with the natural language understanding and generative power of LLMs, to enable more interactive and adaptive problem-solving workflows. In a nutshell, answer sets in input are transformed into prompts for LLMs, whose responses are postprocessed to extract facts for subsequent operations within the recipe.

**Bio**: Mario Alviano graduated cum laude and obtained his Ph.D. at University of Calabria, where he is now Full Professor. He leads the LAIA lab (Laboratorio di Applicazioni dell'Intelligenza Artificiale, part of the SILA IR), is co-PI of the PRIN project PRODE "Probabilistic Declarative Process Mining," and is involved in several projects, among them the PNRR project FAIR "Future AI Research"; the PNRR project Tech4You "Technologies for climate change adaptation and quality of life improvement"; the PNRR project SERICS "SEcurity and RIghts in the CyberSpace"; the POS projects CAL.HUB.RIA and RADIOAMICA; the STROKE 5.0 project.

He has won several academic awards, including Artificial Intelligence Award "Marco Somalvico" 2017 (AIxIA, Italian Association for Artificial Intelligence, best Italian young researchers in AI). honourable mention for his thesis by the European Coordinating Committee for Artificial Intelligence (ECCAI 2012); Italian best thesis in Artificial Intelligence award 2008 (AIxIA); ICLP 2015 Best Paper Award; RR 2015 Best Paper Award; ICLP 2016 Best Paper Award; LPNMR 2022 Best Paper Award; CILC 2023 Best Paper Award.