Virtual BSC RS/ PerMedCoe Webinar: Analysis of huge metabolic models with COBREXA.jl

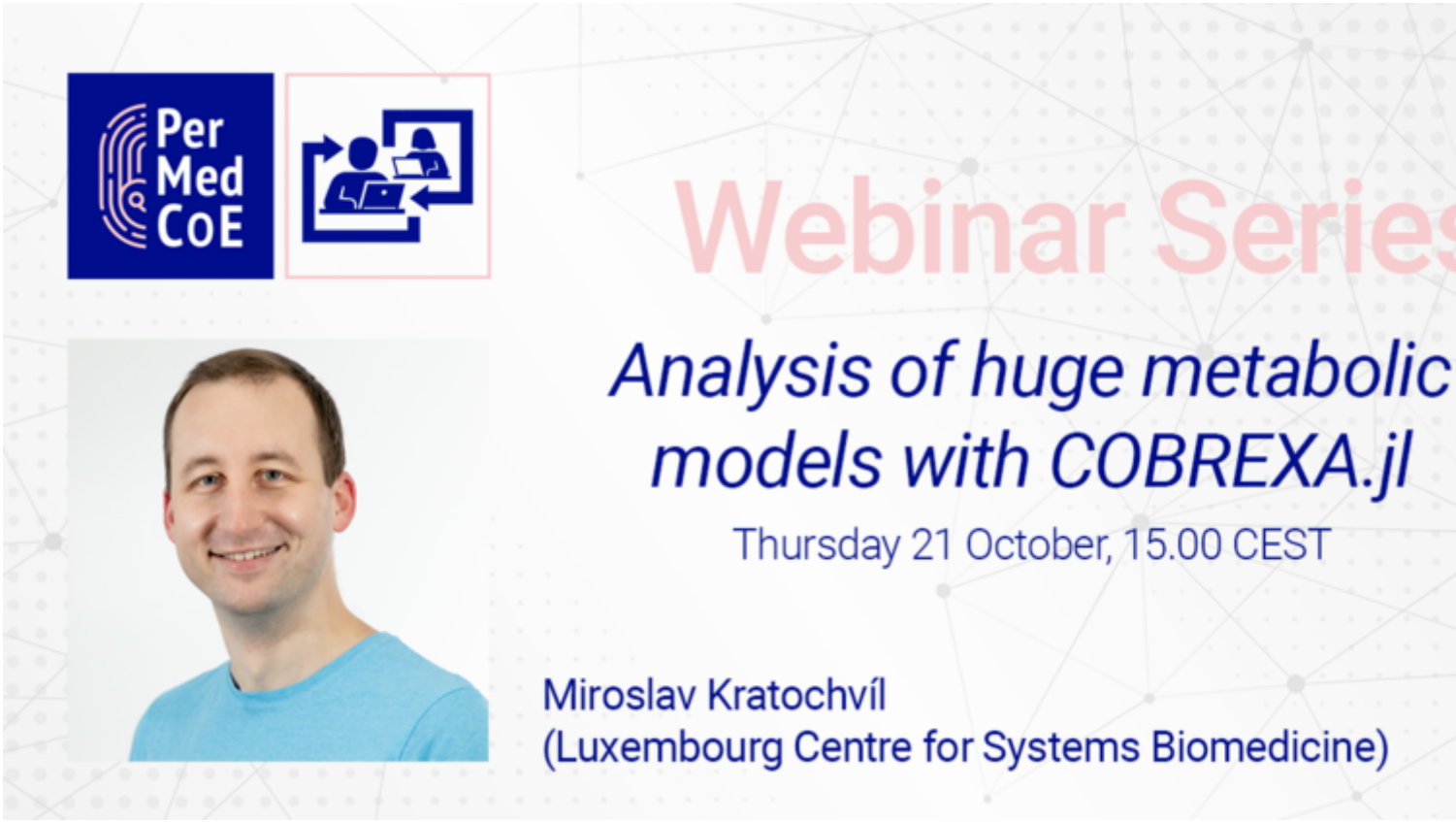
Objectives

Title: PerMedCoE Webinar: Analysis of huge metabolic models with COBREXA.jl

Abstract:
COBREXA.jl is a new software package to enable the analysis and simulation of large metabolic models. by taking advantages of modern HPC infrastructure. Mainly, it advanced the scalability of constraint-based method, using the Julia programing language and its mathematic ecosystem as a base building block. We will talk about the problems that motivated the development of COBREXA.jl and show several of its main applications. We will show the COBREXA.jl interface that allows biologists and bioinformaticians to easily specify large amounts of analyses and execute it on supercomputers. Later, we will use COBREXA.jl for creating a model of a small microorganism community, and demonstrate how the software helps to answer questions about the viability and chemical activity of microbe ecosystems.
We hope you will find this topic interesting and will join us for this second session. We would like to remind you that this webinar is the second of of a set of PerMedCoE webinars that are open to everyone interested in our tools and activities.
The webinars will include a 30-40 minutes presentation and a Q&A section of around 15 minutes. You will find all webinars here: https://permedcoe.eu/category/training/ and you are able to register for free. All PerMedCoE webinars will be made available on the dedicated playlist on the project's YouTube channel.

Speakers

Miroslav Kratochvíl (Luxembourg Centre for Systems Biomedicine)



Learning Outcomes

Overview of the COBREXA application
Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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