

### 10 APRIL 2024 12:00 PM

Bocconi University Room 3-E4-SR03 Via Röntgen 1, Milano (3° floor)

## Open problems about the simplex method

### Speaker

# **Sophie Huiberts** CNRS researcher

Clermont Auvergne University in Clermont-Ferrand

#### **Abstract**

The simplex method is a very efficient algorithm, but little is understood about why it is so. In these lectures we will learn about a few of the state-of-the-art theories for explaining this observation and what their shortcomings are. We will discuss what it takes for a mathematical model to explain an algorithm's qualities. Following this, we question what the simplex method really is, and learn what LP solver developers teach us about where theory can go next.

