ACAT 2019



Contribution ID: 488

Type: Oral

Computer algebra in physics research: algorithms, systems and modern developments

Monday 11 March 2019 09:30 (30 minutes)

Computer algebra is one of a key tools in modern physics research. In this talk I will give an overview of the main mathematical and programming concepts that lie in the basis of modern computer algebra tools and how they are applied for solving modern theoretical physics and some engineering problems. I will also give a sketch overview of modern computer algebra software, including general purpose systems and dedicated tools, how they compare by functionality and performance, and what are the modern trends in the development and programming of computer algebra software.

Author: POSLAVSKII, Stanislav (Institute for High Energy Physics of NRC Kurchatov Institute (R)Presenter: POSLAVSKII, Stanislav (Institute for High Energy Physics of NRC Kurchatov Institute (R)Session Classification: Plenary

Track Classification: Track 3: Computations in Theoretical Physics: Techniques and Methods