Contribution ID: **154** Type: **Plenary talk in the main Conference**

Quantum Computing: a future perspective for scientific computing

Friday, November 3, 2023 11:00 AM (30 minutes)

Quantum computing is rapidly emerging as a new method of scientific computing. It has the potential to solve problems much faster than it is possible with classical computers. Examples are applications in logistics, drug design, medicine finances and many more. In addition, with quantum computers problems can be tackled that are very hard or even impossible to address with classical computers.
After providing an introduction to quantum computing we will discuss why quantum computing can lead to a quantum advantage. We then give several real world examples of applications which can already now be computed on existing quantum computers.

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Session Classification: Conference talks