

Published on *CERN openlab* (<http://test-static-05.web.cern.ch>)

[Home](#) > An Introduction to Parallelism, Concurrency and Acceleration by A. Nowak

An Introduction to Parallelism, Concurrency and Acceleration by A. Nowak ^[1]

Date:

Tuesday, 19 January, 2016 - 11:00 to Wednesday, 20 January, 2016 - 00:00

Location:

[CERN IT Amphitheatre](#) ^[2]

Concurrency and parallelism are firm elements of any modern computing infrastructure, made even more prominent by the emergence of accelerators. These lectures offer an introduction to these important concepts. We will begin with a brief refresher of recent hardware offerings to modern-day programmers. We will then open the main discussion with an overview of the laws and practical aspects of scalability. Key parallelism data structures, patterns and algorithms will be shown. The main threats to scalability and mitigation strategies will be discussed in the context of real-life optimization problems.

Lecturer's short bio:

Andrzej Nowak has 10 years of experience in computing technologies, primarily from CERN openlab and Intel. At CERN, he managed a research lab collaborating with Intel and was part of the openlab Chief Technology Office. Andrzej also worked closely and initiated projects with the private sector (e.g. HP and Google), as well as international research institutes, such as EPFL. Currently, Andrzej acts as a consultant on technology and innovation with TIK Services (<http://tik.services> ^[3]), and runs a peer-to-peer lending start-up.

Indico or other event webpage:

[For more information](#) ^[4]

- [Visit Us](#)
- [RSS Feeds](#)

DISCLAIMER: This Web page contains pointers to material related to the management of CERN openlab in the Information Technology Department at the European Organization for

Nuclear Research (CERN). Their use and distribution are regulated by the CERN copyright notice.



Source URL: <http://test-static-05.web.cern.ch/news/introduction-parallelism-concurrency-and-acceleration-nowak>

Links

- [1] <http://test-static-05.web.cern.ch/news/introduction-parallelism-concurrency-and-acceleration-nowak>
- [2] <http://maps.cern.ch/mapsearch/mapsearch.htm?n=%5B%2731%2F3-004%27%5D>
- [3] <http://tik.services>
- [4] <https://indico.cern.ch/event/404682/>