## NUmerical methods for Compression and LEarning

## Thursday, 12 May 2022

#### Lecture talk (09:00 - 11:00)

time	[id] title	presenter
09:00	[3] The Reduced Basis Method in Space and Time: Challenges, Limits and Perspectives — Part 1	URBAN, Karsten
10:00	[11] Computing Means of SPD matrices — Part 1	IANNAZZO, Bruno

#### Lecture talk (11:30 - 12:30)

time	[id] title	presenter
11:30	[6] Compression of partial differential operators by numerical homogenization	PETERSEIM, Daniel

#### Lecture talk (14:00 - 16:00)

time	[id] title	presenter
14:00	[12] The Reduced Basis Method in Space and Time: Challenges, Limits and Perspectives — Part 2	URBAN, Karsten
15:00	[13] Computing Means of SPD matrices — Part 2	IANNAZZO, Bruno

#### Lecture talk (17:00 - 19:00)

time	[id] title	presenter
17:00	[2] Hierarchical adaptive low-rank format with applications to discretized PDEs	ROBOL, Leonardo
18:00	[14] Neural networks, flexible activation functions and tensor decompositions	USEVICH, Konstantin

# Friday, 13 May 2022

### Lecture talk (08:30 - 10:30)

time	[id] title	presenter
08:30	[8] An SDP approach for tensor product approximation of linear operators on matrix spaces	USCHMAJEW, André
09:30	[5] Koopman operators and a programme on the foundations of infinite-dimensional spectral computations	COLBROOK, Matthew

### Lecture talk (11:00 - 13:00)

time	[id] title	presenter
11:00	[9] Neural and operator network approximations for elliptic PDEs	MARCATI, Carlo
12:00	[15] Sparse optimization methods for infinite-dimensional variational problems	CARIONI, Marcello