



**CIME Summer School**  
**Recent stability issues for linear dynamical systems.**  
**Matrix nearness problems and eigenvalue optimization**

**Lectures**

*Course 1* - N. Gillis (Univ. Mons, Belgium), Solving matrix nearness problems via Hamiltonian systems, matrix factorization and optimization

*Course 2* - N. Guglielmi and Ch. Lubich (GSSI, Italy & Univ. Tübingen, Germany), Eigenvalue optimization and matrix nearness problems via constrained gradient systems

*Course 3* - V. Mehrmann (Univ. Berlin, Germany), Regularity, stability, passivity and controllability of structured linear descriptor systems

*Course 4* - B. Vandereycken (Univ. Genève, Switzerland), Algorithms for eigenvalue optimization related to stability of dynamical systems

**Schedule**

<b>Monday Sept 06, 2021</b>	<b>Tuesday Sept 07, 2021</b>	<b>Wednesday Sept 08, 2021</b>	<b>Thursday Sept 09, 2021</b>	<b>Friday Sept 10, 2021</b>
09-10 Course 2 (Lubich)	09-10 Course 1	09-10 Course 3	09-10 Course 4	09-10 Course 4
10-11 Course 2 (Guglielmi)	10-11 Course 3	10-11 Course 4	10-11 Course 2 (Lubich)	10-11 Course 3
11-12 Course 1	11-12 Course 2 (Guglielmi)	11-12 Course 1	11-12 Course 3	11-12 Course 1
				12-13 Course 4
18-19 Course 3	18-19 Course 2 (Lubich)		18-19 Course 1	
			19-20 Course 4	