

Program

	Monday, June 26	Tuesday, June 27	Wednesday, June 28	Thursday, June 29	Friday, June 30
09:00-10:30	<u>Lecture 1:</u> Francesco Mauri <i>Theory of lattice vibrations and anharmonicity</i>	<u>Lecture 3:</u> Raffaello Bianco <i>Second-order phase transitions in the SSCHA</i>	<u>Hands-on-session 4:</u> Raffaello Bianco <i>Calculation of spectral functions with the SSCHA</i>	<u>Lecture 6:</u> Giovanni Marini <i>Theory of the electron-phonon interaction and superconductivity</i>	<u>Lecture 8:</u> Dorđe Dangić <i>Thermal conductivity in strongly anharmonic crystals</i>
10:30-11:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00-12:30	<u>Lecture 2:</u> Ion Errea <i>Non-perturbative anharmonicity and the SSCHA</i>	<u>Hands-on-session 3:</u> Diego Martinez <i>Calculations of second-order phase transitions with the SSCHA</i>	<u>Lecture 5:</u> Antonio Siciliano <i>Raman and Infrared spectra of strongly anharmonic materials</i>	<u>Hands-on-session 7:</u> Ion Errea <i>Calculation of the electron-phonon interaction and superconducting properties with the SSCHA</i>	<u>Hands-on-session 9:</u> Dorđe Dangić <i>Thermal conductivity calculations with the SSCHA</i>
12:30-14:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break	End of School
14:30-16:00	<u>Hands-on-session 1:</u> Diego Martinez <i>First SSCHA simulations: free energy and structural relaxations</i>	<u>Lecture 4:</u> Raffaello Bianco <i>Spectral functions and spectroscopic properties</i>	<u>Hands-on-session 5:</u> Lorenzo Monacelli <i>Raman and Infrared spectra with the SSCHA</i>	<u>Hands-on-session 8:</u> Giovanni Marini and Guglielmo Marchese <i>Calculation of the electron-phonon interaction with the SSCHA and Wannier functions: the EPIQ code</i>	
16:00-16:30	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16:30-18:00	<u>Hands-on-session 2:</u> Lorenzo Monacelli <i>Setting up automatic SSCHA simulations on clusters</i>	<u>Oral Contributed Talks 1</u> 16:30-16:42 Davide Romanin 16:42-16:54 Nina Girotto 16:54-17:06 Virginie de Mestral 17:06-17:18 Daniil Poletaev 17:18-17:30 Nityasagar Jena 17:30-17:42 Tomas Northam 17:42-17:54 Stefano Paolo Villani	<u>Hands-on-session 6:</u> Dorđe Dangić <i>The SSCHA with machine learning potentials</i>	16:30-17:15 <u>Lecture 7:</u> Lorenzo Monacelli <i>Strengths and limitations of the SSCHA: how does it compare with other approaches?</i> <u>Oral Contributed Talks 2</u> 17:15-17:27 Hussien H. Osman 17:27-17:39 Alfredo Fiorentino 17:39-17:51 Jose Angel Silva Guillén	
20:30-23:30			Conference Dinner		