

Physics in Intense Fields (PIF22)

Tuesday 30 August 2022

Strong Field QED (13:30 - 16:45)

-Conveners: Holger Gies; Naser Ahmadinia

time	[id] title	presenter
13:30	[44] Resurgence of the Gradient Expansion for Intense Fields	Prof. DUNNE, Gerald
14:00	[28] Colliding laser pulses: From Sauter-Schwinger to Breit-Wheeler	Prof. SCHÜTZHOLD, Ralf
14:25	Break	
14:35	[26] Pair production in colliding laser pulses: Computational Aspects	KOHLFUERST, Christian
15:00	[23] Radiation Reaction: Reduction of Order, Runaways, Resummation, Resurgence	Dr EKMAN, Robin
15:25	Break	
15:45	[12] Photon merging in the collision of two laser pulses	SUNDQVIST, Chantal
16:05	[19] Worldline approach to the off-shell four-photon amplitudes	LOPEZ-LOPEZ, Misha Arturo
16:25	[14] Worldline master formulas for dressed electron propagator in constant external fields	BANDA, Victor

Wednesday 31 August 2022

Strong Field QED (08:30 - 09:20)

-Conveners: Felix Karbstein

time	[id] title	presenter
08:30	[37] Coulomb-assisted quantum vacuum birefringence	AHMADINIAZ, Naser
08:55	[30] A unifying approach to strong fields	NOBLE, Adam

Strong Field QED (10:40 - 12:20)

-Conveners: Katarzyna Krajewska ; Felix Karbstein

time	[id] title	presenter
10:40	[8] Quantum kinetic theory and collisional contributions to shear induced polarization	LIN, Shu
11:05	[21] Euler-Heisenberg Lagrangian with axial gauge	COPINGER, Patrick
11:30	[22] Beam focus and longitudinal polarization influence on electron spin dynamics in counterpropagating laser beams	Prof. AHRENS, Sven

Strong Field QED (14:50 - 16:25)

-Conveners: Tom Blackburn

time	[id] title	presenter
14:50	[10] Highly Radiating Charged Particles in a Strong Electromagnetic Field	Dr SASOROV, Pavel
15:10	[2] Acceleration of spin-polarized proton beams from a dual-laser pulse scheme	Mr REICHWEIN, Lars
15:30	Break	
15:45	[3] QED Effects at Grazing Incidence on Solid-State-Targets	FILIPOVIC, Marko
16:05	[25] Generation and acceleration of linear Breit-Wheeler positrons in ultra-intense laser plasma interactions	HE, Yutong

Thursday 1 September 2022

Strong Field QED (09:20 - 10:55)

-Conveners: Daniel Seipt

time	[id] title	presenter
09:20	[9] New and old physics in the interaction of a radiating electron with the extreme electromagnetic field	JIRKA, Martin
09:45	[18] Optimal photon polarization toward the observation of the nonlinear Breit-Wheeler pair production	TANG, Suo
10:05	Break	
10:15	[4] Particle-beam scattering from strong-field QED	Dr MACLEOD, Alexander J
10:35	[11] Nonlinear Compton scattering in time-dependent electric fields: LCFA and beyond	GELFER, Evgeny

Friday 2 September 2022

Strong Field QED (10:45 - 12:05)

-Conveners: Christian Kohlfuerst

time	[id] title	presenter
10:45	[7] Nonlinear Compton scattering and nonlinear Breit-Wheeler pair production including the damping of particle states	Dr DI PIAZZA, Antonino
11:15	[29] The effect of radiative corrections on electron propagation and photon emission in a strong constant crossed field	MIRONOV, Arseny
11:40	[15] Dyson - Schwinger equations in scalar electrodynamics	Mr BEREZIN, A. V.