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## Power corrections to the HTL effective Lagrangian of QED

## **Abstract**

I will discuss some recent computations in thermal field theory centered around the Hard Thermal Loop/ Hard Dense Loop formalism.

First, I will focus on the derivation of power corrections to the HTL effective Lagrangian and introduce the On-Shell effective field theory (OSEFT) as a tool to systematically derive these contributions. I will then show how the OSEFT Lagrangian can be used to derive the equations of relativistic chiral kinetic theory. Finally, I will show results for the damping rate of a fermion in a chirally imbalanced system and discuss the fate of the chiral instability at vanishing temperature.

November 12, 2018 - h 2:30 pm LNGS - "B. Pontecorvo" room

http://agenda.infn.it/event/carignano