



Contribution ID: 8

Type: **Invited Talk**

3D reconnection in solar flares and the hot flare emission

Thursday, 2 March 2023 09:25 (13 minutes)

The 3D extensions to the Standard model of solar flares have been successful in explaining various observed phenomena. Among them, there are (1) hot cores (sigmoids), (2) apparent slipping motion of flare loops, (3) saddle-shaped flare arcades, as well as (4) reconnection of the drifting flux rope with the surrounding corona or itself during the eruption. We review the properties of the 3D reconnection geometries and focus on predicted future observables in the hot flare plasma and its dynamics, especially those that the present instrumentation is insufficient to capture.

Primary author: DUDÍK, Jaroslav (Astronomical Institute of the Czech Academy of Sciences)

Co-author: Dr AULANIER, Guillaume (Sorbonne Université, Observatoire de Paris - PSL, École Polytechnique, Institut Polytechnique de Paris, CNRS, Laboratoire de physique des plasmas (LPP), 4 place Jussieu, F-75005 Paris, France Rosseland Centre for Solar Physics, Institute for Theoretical Astrophysics, Universitetet i Oslo, P.O. Box 1029, Blindern, 0315 Oslo, Norway)

Presenter: DUDÍK, Jaroslav (Astronomical Institute of the Czech Academy of Sciences)

Session Classification: Flares and Eruptions

Track Classification: Flares and Eruptions