Contribution ID: **43** Type: **Invited Talk**

The current state of wave-based heating mechanisms

Tuesday, 28 February 2023 16:45 (21 minutes)

In recent years, a renaissance has occurred for wave heating mechanisms,
because of the plethora of wave observations in the corona since 10-20 years. This renewed interest in wave heating modelling has brought models from the 1D and cartoon level to full 3D wave heating models. It has been realised that the waves naturally induce the formation of small scales through turbulence, leading to an attractive pathway to heating. Despite this interesting pathway and continued modelling efforts, heating was only achieved in quiescent loops, and not in active region loops. Moreover, coupling to the lower atmosphere remains largely unexplored.
In the current talk, I will give an update on the latest models and progress in this field. I will offer a critical survey, point out problems and pathways to potential solutions.

Primary author: VAN DOORSSELAERE, Tom (KU Leuven)

Presenter: VAN DOORSSELAERE, Tom (KU Leuven)

Session Classification: Corona

Track Classification: Corona