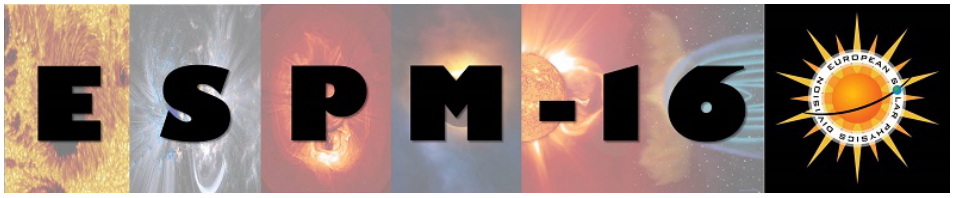


Contribution ID: **318** Type: **Poster**

# From highly-collisional to collisionless fluid models

*Wednesday, 8 September 2021 10:05 (13 minutes)*

The atmosphere of the sun represents a complex physical environment
where two traditional classes of fluid theories come to interplay. While the solar chromosphere is typically modeled with fluid models derived under the highly-collisional assumption, whereas the collisional frequencies in the solar corona can become so small, that collisionless fluid models seem to be more appropriate. We briefly overview these two distinct classes of fluid theories and discuss the major differences between them. We also discuss some preliminary results from a 3rd unifying class of arbitrary-collisional models that are suitable for any regime of collisionality.

## Student poster?

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**Session Classification:** Poster Session 5.4

**Track Classification:** Session 3 - Fundamental Plasma Processes in the Solar Atmosphere: Magnetic Reconnection, Waves, Emission, Particle Acceleration