How can we make the best use of collision cascade data for multiscale models?

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The development of a database of collision cascades such as the IAEA CascadesDB [1] opens a great opportunity for researchers to have access to a large variety of conditions and materials that otherwise would be quite difficult to perform by each individual research group. But in order to have a good use of this data, a discussion is necessary on how to make this data more accessible to researchers working on multiscale models.

In this talk we will, first, give a brief review of the different types of conditions that one could find in this database, based on the simulations of collisions cascades performed by ourselves as well as existing in the literature: materials, boundary conditions or the presence of initial defects (dislocations, grain boundaries, defect clusters). Then we will focus on a discussion on how to improve the access of different researchers working on multiscale models to this data: analysis tools, recommendations, data processing, etc.

1. https://cascadesdb.org/

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