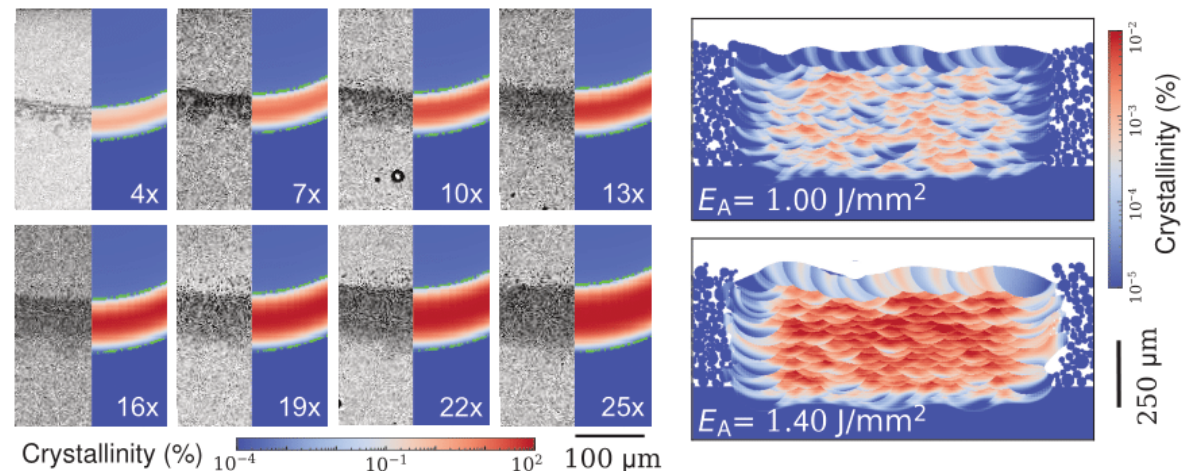


Bachelor Thesis

Topic: Validation of SAMPLE^{2D} for predicting bulk metallic glass crystallization during laser powder bed fusion

Commencement: as soon as possible

Abstract: SAMPLE^{2D} is an in-house developed software that has been used to predict bulk metallic glass crystallization during laser powder bed fusion (L-PBF). Experimental validation of the simulations is strongly desired. Samples created by L-PBF are on the table, but not yet systematically characterized. This thesis should carry out systematic microscopic analysis and post-processing of the nanoindentation data that will be received from WW1. Some simulations should be run as well for comparison. This work does not include any modeling tasks, but basic knowledge of Python is highly desired for analysis.



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