

Abstract Submitted  
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**Construction of a kinetics model for liquid-solid transitions built from atomistic simulations**<sup>1</sup> LORIN BENEDICT, LUIS ZEPEDA-RUIZ, TOMORR HAXHIMALI, SEBASTIEN HAMEL, BABAK SADIGH, ALEXANDER CHERNOV, JONATHAN BELOF, Lawrence Livermore National Laboratory — We discuss work in progress towards a kinetics model for dynamically-driven liquid-solid transitions built from MD simulations. The growth of solid particles within a liquid is studied for a range of conditions, and careful attention is paid to the construction of an accurate multi-phase (equilibrium) equation of state for the system under consideration, in order to provide a framework upon which the non-equilibrium physics is based.

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