

Abstract Submitted
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Supersolid ^4He monolayer MASSIMO BONINSEGNI, University of Alberta — The conditions for the existence of a low temperature supersolid ^4He monolayer are investigated by Monte Carlo simulations. The crystalline film considered here is one that not registered with the underlying substrate crystal structure. Its superfluid response is underlain by large zero-point motion of atoms in the direction perpendicular to the substrate. It is proposed that the physics described here might be observable in a helium film adsorbed on a Ni substrate.

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