

Abstract Submitted  
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**Multi-Particle States in the Finite Volume**<sup>1</sup> MICHAEL DORING, George Washington Univ, DIMITRI AGADJANOV, University of Bonn, MAXIM MAI, George Washington Univ, ULF-G. MEISSNER, University of Bonn, Research Center Jülich, AKAKI RUSETSKY, University of Bonn — The extraction of hadron-hadron scattering parameters from lattice data by using the Lüscher approach becomes increasingly complicated in the presence of inelastic channels. We propose a method for the direct extraction of the complex hadron-hadron optical potential on the lattice, which does not require the use of the multi-channel Lüscher formalism. Moreover, this method is applicable without modifications if some inelastic channels contain three or more particles.

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