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Extracting Efimov physics from three-body recombination at finite energy¹ YUJUN WANG, Department of Physics, Kansas State University, J.P. D'INCAO, JILA, University of Colorado and NIST, B.D. ESRY, Department of Physics, Kansas State University — We have identified energy-dependent features in the three-body recombination rate that can trace their origin to Efimov physics. These features manifest themselves as log-periodic sinusoidal modulations of the rates as a function of energy. This log-periodic behavior provides the link to Efimov physics. Using a model two-body interaction, we calculate the recombination rate numerically for identical bosons and for the Cs-Li mixture. We show, however, that the energy modulations are more clear in Cs+Cs+Li recombination. We will also discuss the issues important for observing these features experimentally.

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