Abstract Submitted for the DNP08 Meeting of The American Physical Society

Blurred femtoscopy in two-proton decay CARLOS BERTULANI,

Texas A&M University - Commerce — The effects of final state interactions in two-proton emission by nuclei is discussed. The study is based on the solution the time-dependent Schroedinger equation. The relative energy between the protons is substantially influenced by the final state interactions. Alternative correlation functions can be constructed showing large sensitivity to the spin of the diproton system. The prospects of using di-proton emission as an EPR experiment is explored.

> Carlos Bertulani Texas A&M University - Commerce

Date submitted: 27 Jun 2008

Electronic form version 1.4