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Exploring Stealth Dark Matter on the Lattice

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We conduct a numerical study of Stealth Dark Matter (SDM), a composite dark matter (DM) model in $SU(4)$ gauge theory, using the method of lattice gauge theory. Utilizing the fastest supercomputers at Lawrence Livermore National Laboratory, we calculate the baryon-baryon scattering in SDM. In this talk, on behalf of the Lattice Strong Dynamics (LSD) collaboration, we discuss the recent progress and computational challenges in our project focused on SDM baryon scattering.

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