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Vortex lattice formation in Bose-condensed gases in rotating potentials TETSURO NIKUNI, Tokyo University of Science, TOSHIHIRO SATO, University of Tokyo, TOMOHIKO ISHIYAMA, Tokyo University of Science — We study vortex lattice formation in trapped Bose-condensed gases in various types of rotating potentials by solving the time-dependent Gross-Pitaevskii equation. We discuss the detailed characteristics of the formation dynamics and the structure of vortex lattices depending on the geometry of rotating potentials.

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