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Dynamic square superlattice of Faraday waves LYES KAHOUADJI, PMMH-CNRS-ESPCI, France, JALEL CHERGUI, DAMIR JURIC, LIMSI-CNRS, France, SEUNGWON SHIN, Hongik University, Seoul, Korea, LAURETTE TUCK-ERMAN, PMMH-CNRS-ESPCI, France — Faraday waves are computed in a 3D container using BLUE, a code based on a hybrid Front-Tracking/Level-set algorithm for Lagrangian tracking of arbitrarily deformable phase interfaces. A new dynamic superlattice pattern is described which consists of a set of square waves arranged in a two-by-two array. The corners of this array are connected by a bridge whose position oscillates in time between the two diagonals.

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