

Description of the files in the Supplementary Material

- "Video1a"- "Video1j" show the motions of an elastic lattice for the wave vector $(\tilde{k}_1, \tilde{k}_2)^T = (2, 2)^T$ at the frequencies of the lower and upper dispersion surfaces. The total displacement fields and their components (vortex, straight-line tangential and straight-line normal) are illustrated, as indicated in the names of the files.
- "Video2a"- "Video2j" show the motions of an elastic lattice for the wave vector $(\tilde{k}_1, \tilde{k}_2)^T = (0.200, 0.297)^T$ at the frequencies of the lower and upper dispersion surfaces. The total displacement fields and their components (vortex, straight-line tangential and straight-line normal) are illustrated, as indicated in the names of the files.
- "Video3a"- "Video3j" show the motions of an elastic lattice for the wave vector $(\tilde{k}_1, \tilde{k}_2)^T = (2.150, 1.241)^T$ at the frequencies of the lower and upper dispersion surfaces. The total displacement fields and their components (vortex, straight-line tangential and straight-line normal) are illustrated, as indicated in the names of the files.
- "Video4a"- "Video4j" show the motions of an elastic lattice for the wave vector $(\tilde{k}_1, \tilde{k}_2)^T = (3.665, 0.907)^T$ at the frequencies of the lower and upper dispersion surfaces. The total displacement fields and their components (vortex, straight-line tangential and straight-line normal) are illustrated, as indicated in the names of the files.
- "Video5a"- "Video5j" show the motions of an elastic lattice for the wave vector $(\tilde{k}_1, \tilde{k}_2)^T = (2\pi/3, 2\pi/\sqrt{3})^T$ at the frequencies of the lower and upper dispersion surfaces. The total displacement fields and their components (vortex, straight-line tangential and straight-line normal) are illustrated, as indicated in the names of the files.