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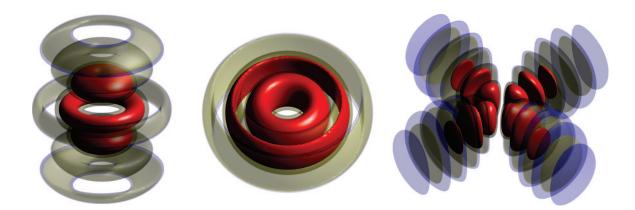


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Isosurface Contour Plots of Tightly Focused High-Order Pseudo-Gaussian Acoustical Beams

The cover image displays numerical simulations representing the isosurface contour plots of the acoustical pressure magnitude of tightly focused (high-order) pseudo-Gaussian beams, with $kw_0 = 0.1$, where k is the wave number and w_0 is the beam waist.

The left panel is the isosurface contour plot of a high-order pseudo-Gaussian vortex (or helicoidal) beam of third degree and first order, i.e., (n,m) = (3, 1), manifested by doughnut-shaped rings above and below the central ring. The central panel is the isosurface contour plot of a high-order pseudo-Gaussian vortex (or helicoidal) beam of third degree and third order, i.e., (n,m) = (3,3), manifested by doughnut-shaped rings around the central ring. The right panel is the isosurface contour plot of a high-order pseudo-Gaussian trigonometric beam of second degree and second order, i.e., (n,m) = (2,2).

Images courtesy of Farid G. Mitri, Los Alamos National Laboratory, Materials Physics and Applications Division, MPA-11, Sensors and Electrochemical Devices, Acoustics and Sensors Technology Team, Los Alamos, NM. The research accompanying these images will appear in an upcoming issue of the *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control.*

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