

**Robert Kohn** is a Professor of Mathematics at New York University's Courant Institute of Mathematical Sciences. He received his PhD from Princeton in 1979 working with Fred Almgren, then held an NSF Postdoctoral Fellowship, before joining the faculty of the Courant Institute in 1981. He was the first recipient of SIAM's Ralph E. Kleinman Prize, in 1999.

Professor Kohn's research focuses largely on mathematical aspects of materials science, including: coarsening due to energy-driven motion, effective behavior of composite materials, epitaxial growth, interface motion laws, martensitic transformation, micromagnetics, pattern formation due to energy minimization, polycrystal plasticity, shape-memory materials, structural optimization, and surface energy as a selection mechanism. Mathematically speaking, his work uses techniques from nonlinear PDE and the calculus of variations, including: bounds and extremal microstructures, homogenization and  $\Gamma$ -convergence, motion by mean curvature, relation of nonconvex variational problems, singularly perturbed variational problems, and singularity formation in nonlinear evolution equations.

Professor Kohn also has a strong interest in quantitative finance. In particular he is among the leaders of the Courant Institute's professional masters program in this area.