

MAR15-2014-020204

Abstract for an Invited Paper  
for the MAR15 Meeting of  
the American Physical Society

### **The Social Appropriation of Quantum Language and Imagery**

ROBERT CREASE, Stony Brook University

Planck introduced 'quantum' as a technical term in 1900 in connection with studies of the emission and absorption of light. Following the development of quantum mechanics in 1925-1927, quantum terminology and imagery – including 'quantum leap,' 'Heisenberg's Uncertainty Principle,' and 'complementarity' – began appearing in ever-widening cultural spheres, including journalism, literature, philosophy, television, and coffee cups and t-shirts. Later, these terms and images were joined by others, including 'Schroedinger's Cat' and 'parallel worlds.' As a result, numerous quantum terms and images have become popular and powerful metaphors in the public imagination. Each of these terms and images followed a different trajectory in moving from their original scientific context into popular culture. This talk explores the trajectories and popular meanings of these terms, as well as their uses and misuses.