

**SPACE-TIME DECAY ESTIMATES FOR STRONGLY  
PROPAGATIVE SYSTEMS:  
FROM MAXWELL TO DIRAC EQUATIONS**

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Spectral theory for general classes of first order systems has been less popular since 1990's. In this talk, I would like to propose a new class of first order systems which generalize both Maxwell and Dirac equations. In this new class, we can treat these two equations in a unified manner, although their physical backgrounds are very different from each other. The main point of my talk is space-time decay estimates for the new class of first order systems. The essential part of the idea is to derive uniform boundedness of the spectral densities.

This talk is based on joint work with Matania Ben-Artzi.