

1038-42-225

**tao Mei\*** ([mei@math.uiuc.edu](mailto:mei@math.uiuc.edu)), Department of Math., University of Illinois at Urbana-Champaign, Urbana, IL 61801. *Tent spaces associated with semigroup of operators.*

Tent spaces were introduced by Coifman, Meyer and Stein in 1980's. They are well adapted for the study of many subjects in the classical analysis. However, its definition relies on two geometric object of Euclidean spaces: "cones" and "cubs" which make it difficult to consider it in general case where geometric/metic structure is missing. We study Tent spaces by using semigroup of operators. As an application, we prove a duality inequality for  $H^1 - BMO$  spaces associated with general subordinated Poisson semigroups. (Received February 10, 2008)