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Haohao Wang* (hwang@semo.edu), Math Department, MS6700, One University Plaza, Cape Girardeau, MO 63701. *μ -Basis of Rational Space Curves of Type $(1; 1; d-2)$ and Minimal Generators for the Associated Rees Algebra.*

In this presentation, we will first investigate the moving surface ideal for rational quartic space curves via local cohomology computation. We will describe the minimal generators of this ideal according to the singularity of the quartic space curve. Then, we will generalize this method to the rational space curves whose μ -basis is of type $(1, 1, d - 2)$, and provide an algorithm to find the minimal generators based solely on three μ -basis elements of the rational space curves. (Received July 04, 2011)