

1010-54-92

**Jerzy Dydak\*** (jdydak@utk.edu), Jerzy Dydak, Dept of Math, University of Tennessee,  
Knoxville, TN 37996. *Coarse dimensions and partitions of unity*. Preliminary report.

Gromov and Dranishnikov introduced asymptotic and coarse dimensions of proper metric spaces via quite different ways. We define coarse and asymptotic dimension of all metric spaces in a unified manner and we investigate relationships between them generalizing results of Dranishnikov and Dranishnikov-Keesling-Uspienskij. (Received August 22, 2005)