

1121-20-265

Kim E Ruane* (kim.ruane@tufts.edu), Tufts University Mathematics Department, 503 Boston Avenue, Medford, MA 02155, and **Chris Hruska**. *Splittings of $CAT(0)$ Groups with Isolated Flats*.

In joint work with C. Hruska, we prove that if a one-ended G is a group acting geometrically on a $CAT(0)$ space with Isolated Flats Property, then the well-defined boundary ∂G is locally connected if and only if G does not have a “geometric” splitting in the sense of Mihalik-Ruane-Tschantz. To prove this result, we must first recognize the boundary as a tree of spaces in the sense of Swiatkowski and then prove a general topology result which says that a tree of connected and locally connected compacta is again locally connected. (Received July 19, 2016)