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**Aimee S.A. Johnson\*** (aimee@swarthmore.edu), Department of Mathematics and Statistics, Swarthmore, PA 19081, and **K. Dajani** and **M. de Vries**. *Partition itineraries and a 2-dimensional version of Loch's theorem.*

In a 1964 result of Loch, it was shown that there is a relationship between the number of digits known for a point  $x$  in  $[0,1)$  in its decimal expansion and its continued fraction expansion. In 2001, Dajani and Fieldsteel related this result to partitions associated to 2 dynamical systems and thus were able to generalize the result to a class of dynamical systems. In this talk, joint work with Dajani and de Vries will be discussed which gives a 2-dimensional version of Loch's theorem. (Received August 15, 2005)