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Ale Jan Homburg (a.j.homburg@uva.nl), Science Park 904, 1098 XH, Amsterdam, Netherlands, and **Todd Young*** (young@math.ohiou.edu), Department of Mathematics, 321 Morton, Athens, OH 54701. *Bifurcations of random differential equations with bounded noise on surfaces.*

In random differential equations, with bounded noise, minimal forward invariant (MFI) sets play a central role since they support stationary measures. We study the stability and possible bifurcations of MFI sets. In dimensions 1 and 2 we classify all minimal forward invariant sets and their codimension-one bifurcations in bounded noise random differential equations under generic conditions.

We find in 1 dimension that there is only 1 codimension-one bifurcation, which is an analog of the saddle-node bifurcation. In 2 dimensions we show that there are 3 distinct codimension-one bifurcations. (Received August 19, 2009)