1157-60-100 **Carl Mueller*** (carl.e.mueller@rochester.edu), Department of Mathematics, University of Rochester, Rochester, NY 14627, and **Robert Dalang** and **Yimin Xiao**. *Polarity of Almost All Points for Systems of Non-Linear Stochastic Heat Equations in the Critical Dimension.*

We study vector-valued solutions $u(t,x) \in \mathbb{R}^d$ to systems of nonlinear stochastic heat equations with multiplicative noise:

$$\frac{\partial}{\partial t}u(t,x) = \frac{\partial^2}{\partial x^2}u(t,x) + \sigma(u(t,x))\dot{W}(t,x).$$

Here $t \geq 0$, $x \in \mathbb{R}$ and $\dot{W}(t,x)$ is an $\mathbb{R}^d$-valued space-time white noise. We say that a point $z \in \mathbb{R}^d$ is polar if

$$P\{u(t,x) = z \text{ for some } t > 0 \text{ and } x \in \mathbb{R}\} = 0.$$

We show that in the critical dimension $d = 6$, almost all points in $\mathbb{R}^d$ are polar. (Received January 20, 2020)