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Adam Larios, NE 68588-0130, **Mohammad Mahabubur Rahman***, Department of Mathematics and Statistics, Lubbock, TX 79409, and **Kazuo Yamazaki**, Department of Mathematics and Statistics, Lubbock, TX 79409. *Regularity Criteria for the Kuramoto-Sivashinsky Equation in Dimensions Two and Three.*

The regularity criteria for the 2D and 3D Kuramoto-Sivashinsky equation is discussed in both its scalar and vector forms. In particular, we examine integrability criteria for the regularity of solutions in terms of the scalar solution ϕ , the vector solution $u := \nabla\phi$, as well as the divergence $div(u) = \Delta\phi$, and each component of u and ∇u .

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