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 $\phi$, the vector solution $u := \nabla \phi$, as well as the divergence $\text{div}(u) = \Delta \phi$, and each component of $u$ and $\nabla u$.

This is a joint work with Prof. Adam Larios and Prof. Kazuo Yamazaki. (Received August 20, 2021)