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Between the Kernel and the Kay Dee Vee:
the breaking of a solitary wave

We use a recent model of the Kortweg de Vries equation, replacing the dispersion term with an integral term. By a careful choice of the kernel in the integral term, the relative strength of the nonlinear and dispersive terms can be adjusted. This is demonstrated, inter alia, by showing how a solitary wave may be evolved to the shock solution of hydraulic flow.

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