

## **Plastic limit of a viscoplastic Burgers equation**

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We study the Burgers equation featuring an additional term governed by a positively 1-homogeneous potential. This problem is motivated by the so-called Hibler's sea ice model. It treats sea ice as a non-Newtonian fluid, where the stress tensor includes such a term in order to account for the plastic response of the ice.

For this simplified one-dimensional model we introduce a suitable notion of solution in the framework of BV-solutions. Starting in the regularized setting of a viscoplastic Burgers equation, we study the existence of such generalized solutions. We investigate the passage to the plastic limit and further discuss the properties of the solutions.

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