About the Landau equation with singular initial data

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Thanks to the work of Guillen-Silvestre, it is known that the Fisher information decreases for the (spatially homogeneous) Landau equation with Coulomb interaction, so that strong solutions to this equation exist when the initial datum is not too singular. In a work in collaboration with Golding, Gualdani and Loher, we study the situation when the initial datum is singular, providing an alternative approach to the work of Ji on the same subject. The specificity of our work is that it combines already existing estimates, so that our proof is very short.

