



# Dissipative solitons compounds in a fiber laser. Analogy with the states of the matter

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Auteur	Amrani, Foued [1], Haboucha, Adil [2], Salhi, Mohamed [3], Leblond, Hervé [4], Komarov, Andrey [5], Sanchez, François [6]
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Résumé en anglais	We investigate experimentally ordered and disordered pattern formation of solitons in a double-clad fiber laser. We point out an analogy between the different states of matter and the states of a set of dissipative solitons. In particular, we have identified a gas, a supersonic gas flow, a liquid, a polycrystal and a crystal of solitons. The different states are obtained only by adjustment of the intracavity phase plates.
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