

## **Critical non-linear dispersive equations: global existence, scattering, blow-up and universal profiles\***

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**Abstract.** We discuss recent progress in the understanding of the global behavior of solutions to critical non-linear dispersive equations. The emphasis is on global existence, scattering and finite time blow-up. For solutions that are bounded in the critical norm, but which blow-up in finite time, we also discuss the issue of universal profiles at the blow-up time.

*Keywords and phrases:* critical non-linear dispersive equation, global existence, scattering, finite time blow-up, universal profiles

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