

# Dispersive shock wave in the continuous limit of Fermi-Pasta-Ulam models

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**Abstract:** We consider the continuous limit of a chain of nonlinear oscillators interacting by cubic and quartic potentials (Fermi-Pasta-Ulam models). We provide an analytic description of the local behaviour near the catastrophe point and perform numerical analysis of the dispersive shock wave onset in the framework of the universality conjecture.