

Recent results on oscillons

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Oscillons are quasi-periodic localized solutions in nonlinear field theories whose unexpectedly long life time is still a mystery. I will present two recent surprising results. Firstly, I will comment on the proposed sphaleron-oscillon relation, which treats these two, at first glance independent excitations, in a unified way. Secondly, I will show that, contrary to common belief, an oscillon can exist in gapless models, i.e., in models with massless fields.