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**Dynamics of excitations in a one-dimensional Bose liquid**

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The dynamical structure factor $S(q,\omega)$ of interacting 1D liquid is studied. This quantity has become experimentally accessible in the recent experiments on cold atoms and neutron scattering off spin chains. We find power law non-analyticities $S(q,\omega) \propto (\omega - \epsilon_{1,2}(q))^{-\mu(q)}$ at the kinematical thresholds characterized by the momentum dependent exponents evauated in a broad range of parameters.