

The Generalized Zakharov-Shabat Systems and the Gauge Group Action

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The fundamental properties of the generalized Zakharov-Shabat systems and the systems studied by Caudrey, Beals and Coifman (CBC systems) and their gauge equivalent are considered. This includes: the properties of their fundamental analytical solutions (FAS), the minimal set of scattering data, the description of the class of nonlinear evolutionary equations solvable by the inverse scattering method and the recursion operator, related to such systems.