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**ZHIJUN QIAO**, NCST/UTRGV

*Integrable CH hierarchy and beyond*

In this talk, we will present one of the CH developments, namely, the Camassa-Holm hierarchy and its integrable structure etc. We will see how the CH hierarchy is related to finite-dimensional integrable systems, and furthermore algebro-geometric solutions of the CH hierarchy are shown on a symplectic submanifold. Other similar peakons models, including the DP, the b-family, and cubic equations (MOCH, FORQ/MCH, Novikov etc) will be mentioned as well. Some results are selected from my 2003 CMP paper, but we will present our recent studies on the higher-order CH type equations as well.