

School of Mathematical and Statistical Sciences

Colloquium Series

Explicit Solutions to Integrable Evolution Equations

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Abstract

A review is presented for constructing certain explicit solutions to integrable evolution equations. The solutions are expressed as formulas in a compact form in terms of a constant matrix triplet. The construction is based on solving the associated Marchenko integral equations explicitly by representing their kernels in terms of the constant matrix triplet, using matrix exponentials, and exploiting the separability of those kernels. The method is illustrated with some examples.

Date: Friday, March 2, 2018

Time: 4:00pm–5:00pm

Place: EMAGC 1.410

The talk will be delivered live at the Edinburg campus and will be streamed to the Brownsville campus at BLHSB 2.312. Refreshments will be served at 3:50pm.

For further information or for special accommodations, please contact Dr. BaoFeng Feng at 665-2269 or via email at baofeng.feng@utrgv.edu.