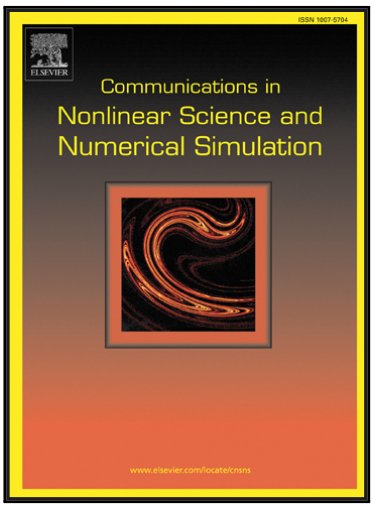

Periodic and Localized Wave Patterns for Coupled Ablowitz-Ladik Systems with Negative Cross Phase Modulation

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Highlights

- A new system of Ablowitz-Ladik equations with cross phase modulation is studied.
- The Hirota bilinear form is deduced and breathers are derived exactly.
- Rogue wave (localized) solutions with pulsations are generated by a long wave limit.
- Spatially periodic breathers are utilized to verify conservation laws.