

Welcome to the submission system of ICIAM 2023 Tokyo.

Your Papers

#	Title	Authors	Submitted At	Status	Action
01557	Spectral properties of nonlinear excitations in semiclassical systems with charge transport	Juan FR Archilla (Universidad de Sevilla), Janis Bajars (University of Latvia), Yusuke Doi (Osaka University), Masayuki Kimura (Setsunan University)	2023-01-19	Completed(Accepted)	Detail

Paper Detail

Submission number	01557
Title of the talk in minisymposium	Spectral properties of nonlinear excitations in semiclassical systems with charge transport in Localized waves in nonlinear discrete systems
Corresponding author	Juan FR Archilla (Universidad de Sevilla)
Editor (Minisymposium)	Kazuyuki Yoshimura (Tottori University)
Current status	Completed(Accepted)
Abstract	We study the spectral properties of polarobreathers, that is, breathers carrying charge in a semi-classical model. Lattice particles are described mathematically, while the charged particle is described as a quantum one within the tight-binding approximation. Three different spectra are considered: the spectra of the atom positions, the spectra of the charge carrier probability and the spectra of charge carrier probability amplitude. The observed spectrum properties are related with the physical properties of the semiclassical system.
Keywords	semiclassical systems, breather, soliton, spectrum, charge transport
Author(s)	Juan FR Archilla (Universidad de Sevilla) Janis Bajars (University of Latvia) Yusuke Doi (Osaka University) Masayuki Kimura (Setsunan University)

Editor's Comment

Your submission

Number: 01557

Corresponding Author: Juan FR Archilla

Title: Spectral properties of nonlinear excitations in semiclassical systems with charge transport

Submission Type: Talk in Minisymposium

has been evaluated and accepted for a minisymposium/talk at ICIAM2023(ICIAM2023 @ Tokyo : August 20-25, 2023).