Record Nr. UNINA9910887808803321 Autore Schwenninger Felix L Titolo Systems Theory and PDEs: Open Problems, Recent Results, and New Directions / / edited by Felix L. Schwenninger, Marcus Waurick Cham:,: Springer Nature Switzerland:,: Imprint: Birkhäuser,, 2024 Pubbl/distr/stampa **ISBN** 3-031-64991-5 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (262 pages) Collana Trends in Mathematics, , 2297-024X Altri autori (Persone) WaurickMarcus Disciplina 003 Soggetti System theory Control theory Differential equations Systems Theory, Control **Differential Equations** Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia On some Impedance Boundary Conditions for a Thermo-Piezo-Nota di contenuto Electromagnetic System -- A Note on Some Non-Local Boundary Conditions and their Use in Connection with Beltrami Fields -- Spectral Theory for Schrodinger Operators on Compact Metric Graphs with AND Couplings: A Survey -- Asymptotic Stability of port-Hamiltonian Systems -- Port-Hamiltonian Formulation of Oseen Floes -- On the equivalence of geometric and descriptor representations of linear port-Hamiltonian systems -- On Differential-Algebraic Equations with Bounded Spectrum in Banach Spaces -- BIBO stability for funnel control: semilinear internal dynamics with unbounded input and output operators -- On checking Lp-admissibility for parabolic control systems. Sommario/riassunto This volume presents recent advances and open problems in the cross section of infinite-dimensional systems theory and the modern treatment of PDEs. Chapters are based on talks and problem sessions from the first "Workshop on Systems Theory and PDEs" (WOSTAP), held at TU Bergakademie Freiberg in July 2022. The main topics covered

include: Differential algebraic equations Port-Hamiltonian systems in both finite and infinite dimensions Highly nonlinear equations related

 to elasticity/plasticity Modeling of thermo-piezo-electromagnetism.