



# JOURNAL OF DIFFERENTIAL EQUATIONS

## Editors-in-Chief

---

Alberto Bressan  
Shui-Nee Chow  
John Mallet-Paret  
W.-M. Ni

## Founding Editors

---

Jack K. Hale  
J. P. LaSalle

## Editorial Board

---

Henri Berestycki	Denis Serre
Alexandre Carvalho	Walter Strauss
Courtney Coleman	Roger Temam
Adrian Constantin	C. Eugene Wayne
Eduard Feireisl	Juncheng Wei
Avner Friedman	Sijue Wu
Yuan Lou	Yingfei Yi
Kening Lu	Chongchun Zeng
Robert McCann	Enrique Zuazua
Konstantin Mischaikow	

CONTENTS

**Chao Deng and Tong Li.** Well-posedness of a 3D parabolic–hyperbolic Keller–Segel system in the Sobolev space framework ..... 1311

**Seung-Yeal Ha, Feimin Huang, and Yi Wang.** A global unique solvability of entropic weak solution to the one-dimensional pressureless Euler system with a flocking dissipation ..... 1333

**Jian-Wen Sun, Fei-Ying Yang, and Wan-Tong Li.** A nonlocal dispersal equation arising from a selection–migration model in genetics ..... 1372

**Bui Le Trong Thanh, Flavia Smarrazzo, and Alberto Tesei.** Sobolev regularization of a class of forward–backward parabolic equations ..... 1403

**Huyuan Chen and Laurent Véron.** Semilinear fractional elliptic equations involving measures ..... 1457

**Bohui Chen, An-Min Li, and Li Sheng.** Uniform K-stability for extremal metrics on toric varieties ..... 1487

**Kun-Peng Jin, Jin Liang, and Ti-Jun Xiao.** Coupled second order evolution equations with fading memory: Optimal energy decay rate ..... 1501

**Patrizia Pucci and Qihu Zhang.** Existence of entire solutions for a class of variable exponent elliptic equations ..... 1529

**Yanbo Hu and Guodong Wang.** Semi-hyperbolic patches of solutions to the two-dimensional nonlinear wave system for Chaplygin gases ..... 1567

**Antonio Gaudiello and Rejeb Hadiji.** Ferromagnetic thin multi-structures ..... 1591

**Ilker E. Colak, Jaume Llibre, and Claudia Valls.** Hamiltonian linear type centers of linear plus cubic homogeneous polynomial vector fields ..... 1623

**Chunhua Shan and Huaiping Zhu.** Bifurcations and complex dynamics of an SIR model with the impact of the number of hospital beds ..... 1662

**Abstracted/Indexed in** Mathematical Reviews, Science Citation Index Thomson Scientific, Compumath Citation Index, Zentralblatt MATH, Current Contents: (PC & ES). Also covered in the abstract and citation database Scopus<sup>®</sup>. Full text available on ScienceDirect<sup>®</sup>.

For a full and complete Guide for Authors please visit <http://www.elsevier.com/locate/jydeq>

**The Journal of Differential Equations has no page charges.**

