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Research Interests:

Differential Equations, Dynamical Systems, Dynamics of Hamiltonian PDEs, Spectral Theory of Schrödinger Operators

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Preprints:

- Point Spectrum of the Quasi-Periodic Long Range Operators. **Preprint**.

  J. You, S. Zhang and Q. Zhou.
- Phase Transition and Semi-Global Reducibility. **Preprint**.

  J. You and Q. Zhou.

Accepted for publication:

- Localization in One-dimensional Quasi-periodic Nonlinear Systems. To appear in *Geometric And Functional Analysis*. **Preprint**.

  J. Geng, J. You and Z. Zhao.
- Examples of Discontinuity of Lyapunov Exponent in Smooth Quasi-Periodic Cocycles. To appear in *Duke Mathematical Journal* 2013. **Preprint**.

  Y. Wang and J. You
- Embedding of Analytic Quasi-Periodic Cocycles into Analytic Quasi-Periodic Linear Systems and its Applications. To appear in *Communications in Mathematical Physics* 2013. **Preprint**.

  J. You and Q. Zhou
- Reducibility of Slow Quasi-Periodic Linear Systems. To appear in *Proceedings of the American Mathematical Society* 2013. **Preprint**.

J. Wu and J. You

- Hölder continuity of the Lyapunov exponent for analytic quasiperiodic Schrödinger cocycle with weak Liouville frequency. To appear in *Ergod. Th. & Dynam. Sys.* 2013. **Preprint**.
  J. You and S. Zhang

Publications:

Note: The button marked **Article** provides a pdf of the article for your personal, non-commercial use and should not be reposted. **E-Journal** will take you to the journal site and require you or your institution to have a subscription.

- Almost reducibility and non-perturbative reducibility of quasi-periodic linear systems. *Invent. Math.* 190 (**2012**), no. 1, 209–260. **Article**; **E-Journal**.
  X. Hou and J. You

- An infinite dimensional KAM theorem and its application to the two dimensional cubic Schrödinger equation. *Adv. Math.* 226 (**2011**), no. 6, 5361–5402. **Article**; **E-Journal**.
  J. Geng, X. Xu and J. You

- Persistence of the non-twist torus in nearly integrable Hamiltonian systems. *Proc. Amer. Math. Soc.* 138 (**2010**), no. 7, 2385–2395. **Article**; **E-Journal**.
  J. Xu and J. You

- Local rigidity of reducibility of analytic quasi-periodic cocycles on U(n). *Discrete Contin. Dyn. Syst.* 24 (**2009**), no. 2, 441–454. **Article**; **E-Journal**.
  X. Hou and J. You

- Corrigendum for the paper: "Two-dimensional invariant tori in the neighborhood of an elliptic equilibrium of Hamiltonian systems" in Acta Mathematica Sinica, English Series August 2009, Volume 25, Issue 8, pp 1363-1378. **Article**
  H. Lu and J. You

- Two-dimensional invariant tori in the neighborhood of an elliptic equilibrium of Hamiltonian systems. *Acta Mathematica Sinica, English Series* August 2009, Volume 25, Issue 8, pp 1363-1378. **Article**; **E-Journal**.
  H. Lu and J. You

- Full measure reducibility for generic one-parameter family of quasi-periodic linear systems. *J. Dynam. Differential Equations* 20 (**2008**), no. 4, 831–866. **Article**; **E-Journal**.
  H. He and J. You

- The rigidity of reducibility of cocycles on SO(N ,R). *Nonlinearity* 21 (**2008**),no. 10, 2317–2330. **Article**; **E-Journal**.
  X. Hou and J. You

- Diophantine vectors in analytic submanifolds of Euclidean spaces. *Sci. China Ser. A.* 50 (**2007**), no. 9, 1334–1338. **Article**; **E-Journal**.
  R. Cao and J. You

- Corrigendum for the paper: "Invariant tori for nearly integrable Hamiltonian systems with

degeneracy" [Math. Z. 226 (1997), no. 3, 375–387] by Xu, You, and Q. Qiu. *Math. Z.* 257 (**2007**), no. 4, 939. **Article**; **E-Journal.**

J. Xu and J. You

- Gevrey-smoothness of invariant tori for analytic nearly integrable Hamiltonian systems under Rüssmann's non-degeneracy condition. *J. Differential Equations* 235 (**2007**), no. 2, 609–622. **Article**; **E-Journal.**

  J. Xu and J. You

- KAM Tori for Higher Dimensional Beam Equation with Constant Potentials, *Nonlinearity* 19 (**2006**), no. 10, 2405–2423. **Article**; **E-Journal.**

  J. Geng and J. You

- The Existence of Integrable Invariant Manifolds of Hamiltonian Partial Differential Equations, *Discrete and Continuous Dynamical Systems* 16 (**2006**), no. 1, 227–234. **Article**; **E-Journal.**

  R.Cao and J. You

- An Improved Result for Positive Measure Reducibility of Quasi- periodic Linear Systems, *Acta Mathematica Sinica* (English series) 22 (1), **2006**, 77-86. **Article**; **E-Journal.**

  H. He and J. You

- A KAM Theorem for Partial Differential Equations in Higher Dimensional Space, *Communications in Mathematical Physics*, Vol.262(2), **2006**, 343-372. **Article**; **E-Journal.**

  J.Geng and J.You

- Umbilical Torus Bifurcations in Hamiltonian Systems, *J. Differential Equations*, Vol. 222(1), **2006**, 233-262. **Article**; **E-Journal.**

  H. Broer, H. Hanssmann and J. You

- A simple proof of diffusion approximations for LBFS re-entrant lines, *Oper. Res. Lett.*, 34 (**2006**), no. 2, 199–204. **Article**; **E-Journal.**

  J. Yang, J.G. Dai, J. You and H. Zhang

- Quasi-Periodic Solutions for 1D Schrödinger Equations with Higher Order Nonlinearity, *SIAM J. Mathematical Analysis*, 36(**2005**), 1965-1990. **Article**; **E-Journal.**

  Z. Liang and J. You

- Bifurcations of Normally Parabolic Tori in Hamiltonian Systems, *Nonlinearity*, 18 (**2005**) 1735-1769. **Article**; **E-Journal.**

  H. Broer, H. Hanssmann and J. You

- A KAM Theorem for One Dimensional Schrödinger Equation with Periodic Boundary Conditions, *J. Differential Equations*, 209, **2005**, 1-56. **Article**; **E-Journal.**

  J. Geng and J. You

- KAM tori of Hamiltonian perturbations of 1D linear beam equations, *J.Math.Anal.Appl.*, 277, **2003**, 104-121. **Article**; **E-Journal.**

  J. Geng and J. You

- A Symplectic Map and its Application to the Persistence of Lower Dimensional InvariantTori, *Science in China*, 45(5), **2002**,598-603. **Article**; **E-Journal.**

J. Xu and J. You

- Persistence of lower dimensional tori under the first Melnikov's non-resonance condition, *Journal de Mathematiques Pures et Appliquees*, 80 (10), **2001**, 1045-1067. **Article**; **E-Journal**.

  J. Xu and J. You

- KAM theory for lower dimensional tori of nearly integrable Hamiltonian systems, *Progress in Nonlinear Analysis,* edited by K-C.Chang and Y. Long, World Scientific, **2000**, 409-423. **Article**; **E-Journal**.

  J. You

- KAM tori for 1D nonlinear wave equations with periodic boundary conditions, *Communications in Mathematical Physics*, Vol.211(2), 497-525, **2000**. **Article**; **E-Journal**.

  L. Chierchia and J. You

- KAM-type theorem on resonant surfaces for nearly integrable Hamiltonian systems, *J. Nonlinear Science*, Vol.10, 49-68, **2000**. **Article**; **E-Journal**.

  F-Z. Cong, T. Kupper, Y. Li and J. You

- Lower dimensional tori of reversible Hamiltonian systems in the resonant zone, *Dynamical Systems,* Proceedings of the International Conference in Honor of Professor Liao Shantao, 9-12, August,1998. Editors, Yunping Jiang, Lan Wen, World Scientific, **1999**, 301-314.

  J. You

- Perturbations of lower dimensional tori for Hamiltonian systems, *J.Differential Equations,* Vol. 152, 1-29, **1999**. **Article**; **E-Journal**.

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- Existence of quasiperiodic solutions and Littlewood's boundedness problem of Duffing equations with subquadratic potentials, *Nonlinear Anal.* 35 (**1999**), no. 5, Ser. A: Theory Methods,549-559. **Article**; **E-Journal**.

  T. Kupper and J. You

- A KAM theorem for hyperbolic type degenerate lower dimensional tori in Hamiltonian systems, *Communications in Mathematical Physics*, Vol.192, 145-168, **1998**. **Article**; **E-Journal**.

  J. You

- Quasiperiodic solutions of Duffing's Equations, *J. Nonlinear Analysis: TMA,* **1998**. **Article**; **E-Journal**.

  B. Liu and J. You

- Oscillatory escape in a Duffing equation with Polynomial potentials, *J. Differential Equations*, Vol.140, pp 415-426, **1997**. **Article**; **E-Journal**.

  M. Levi and J. You

- On the Application of KAM Theory to Discontinuous Dynamical Systems, *J. Differential Equations*, Vol. 139, pp.1-21, **1997**. **Article**; **E-Journal**.

  M. Kunze, T. Kupper and J. You

- Invariant tori of nearly integrable Hamiltonian systems with degeneracy, *Mathematische Zeitschrift*, Vol.226, 375-386, **1997**. **Article**; **E-Journal**.

  J. Xu, Q. Qiu and J. You

- A KAM Theorem of Degenerate Infinite Dimensional Hamiltonian Systems(I，II), *Science in China*, Vol.39(4), 372-394, **1996**. **Article**; **E-Journal**.

  J. Xu, Q. Qiu and J. You

- Boundedness of solutions for time dependent polynomial potentials with C2 coefficients, *Z. Angew. Math. Phys.*, Vol. 47, **1996**. **Article**; **E-Journal**.

  Y. Wang and J. You

- On reducibility of linear differential equations with almost periodic coefficients, *Chinese Journal of Contemporary Mathematics*, Vol.17 (**1996**), 375-386.

  J. Xu and J. You

- Quasiperiodic solutions for a class of quasiperiodic forced differential equations, *J. Math. Anal. and Appl.* Vol.192(3),**1995**. **Article**; **E-Journal**.

  J. You

- Stability of a parabolic fixed point of reversible mappings, *Chin. Ann. of Math. (Series B)*, Vol. 15(2), **1994**, 147-152.

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- Quasiperiodic solutions for nonlinear differential equations of second order with symmetry. A Chinese summary appears in Acta Math. Sinica 38 (1995), no. 4, 574. *Acta Math. Sinica (N.S.)* 10 (1994),no. 3, 231–242. **Article**; **E-Journal**.

  B. Liu and J. You

- Periodic solutions of forced second order equations with the oscillatory time map, *Differential and Integral Equations*，Vol. 6(4) 793-806, **1993**.

  D. Qian and J.You

- Boundedness for solutions of superlinear Duffing's equations via the twist theorem, *Science in China(series A)*, 35(4), **1992**, 399-412.

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- Boundenness of solutions and quasiperiodic solutions of nonconservative pendulum systems in a certain class, *Chinese Bulletin of Science (Kexue Tongbao)*, 36(21),**1991**, 1906-1909.

  J. You

- Invariant tori and Lagrange stability of pendulum type equations, *J. Diffential Equations*, 85 (1), **1990**, 54-65. **Article**; **E-Journal**.

  J. You

Teaching:

- Mathematical Analysis (Fall 2005-2008, undergraduate freshman courses).
- Geometrical Methods in the Theory of Ordinary Differential Equations (Fall 2009-2011,

undergraduate junior courses).

- Seminar of Dynamical Systems (Spring 2011-2013, undergraduate junior courses).
- Dynamical Systems (Spring 2008-2010, graduate courses).
- Differential Dynamical Systems (Spring 2011, graduate course).
- Hamiltonian Systems and N-Body Problems(Spring 2012, graduate course).
- Chaos in Dynamical Systems (Spring 2013, graduate course).

Links:

- List of J.You's papers from the AMS MathSciNet with links to Mathematical Reviews. (Click **here**).
- arXiv.org, my preprint.
- print.google.com.
- scholar.google.com.
- Math Department of NJU .

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