

2011 年度 坂上チーム口頭発表

① 招待講演 (国内 2件、国際 14件)

〈国内〉

- A-1. 齊木吉隆, カオス力学系の不安定周期軌道解析, Kunitachi One-Day Symposium on Mathematical Sciences, 一橋大学, 2012/2/3.
- A-2. 坂上貴之, 多重連結領域の点渦力学, 第40回数值解析シンポジウム, 鳥羽シーサイドホテル, 三重県, 2011/6/20-22.

〈国際〉

- A-1. Takashi Sakajo, "Force-enhancing vortex equilibria for two plates in uniform flow," Hot Topic Workshop on Fluid Dynamics: Vortex Dynamics, Biofluids and Related Fields, NIMS, 韓国, 2011/12/12-14.
- A-2. Tsuyoshi Yoneda, "Long time solvability of equations in geophysical fluid dynamics," Emerging Topics on Differential Equations and their Applications, Sino-Japan Conference of Young Mathematicians, Nankai University, 中国, 2011/12/5-9.
- A-3. Tsuyoshi Yoneda, "Long time solvability of equations in geophysical fluid dynamics," SIAM Conference on Analysis of Partial Differential Equations, San Diego, 米国, 2011/11/14-17.
- A-4. Takashi Sakajo, "Point vortex dynamics in multiply connected domains and its applications," International Conference on Fluid and Gas Dynamics, Zhejiang Normal University, 中国, 2011/9/23-27.
- A-5. Tsuyoshi Yoneda, "On a generalized Bernoulli principle for the incompressible Euler equations," Mathematics colloquium, Sungkyunkwan University, 韓国, 2011/9/15.
- A-6. Tsuyoshi Yoneda, "Global solvability of the rotating Navier-Stokes equations and related topics," Minisymposium of ICIAM 2011, Vancouver, カナダ, 2011/7/18-22.
- A-7. Tsuyoshi Yoneda, "Long time solvability of the Navier-Stokes-Boussinesq Equations and Related Topics," 2011 ICIAM Satellite Meetings, University of Victoria, カナダ, 2011/7/12-15.
- B-1. Zin Arai, "Topological approaches to coherent structures in fluid dynamics," CCS Symposium Autumn 2011, 名古屋大学, 2011/11/1-2.
- B-2. Zin Arai, "Topological and algebraic aspects of the monodromy and bifurcations of complex dynamical systems," 応用トポロジー: 情報通信・生命科学との連携を目指して, JR 博多駅ビル10F, 2011/8/30-9/2.
- B-3. Zin Arai, "Monodromy computation and its application to bifurcation analysis,"

School and Conference on Computational Methods in Dynamics, Trieste, イタリア, 2011/6/20-7/8.

- C-1. Takashi Ishihara, "High-performance computing of canonical high-Reynolds-number turbulent flows," ICTS-TIFR Discussion Meeting-2011, Indian Institute of Science, Bangalore, 2011/12/15.
- C-2. Takashi Ishihara, "Conditional statistics near strong thin shear layers in DNS of high Reynolds number turbulence," Seminar at the University of Hong Kong, 2011/6/16.
- C-3. Takashi Ishihara, "Conditional statistics near strong thin shear layers in DNS of high Re turbulence," KITP Program: The Nature of Turbulence, University of California, Santa Barbara, USA, 2011/4/20.
- C-4. Takashi Ishihara, Julian C.R. Hunt, Yukio Kaneda, "Conditional statistics near strong thin shear layers in DNS of isotropic turbulence at high Reynolds number," The School of Mathematical & Statistical Sciences (SoMSS) Seminar, Arizona State University, 2011/4/13.

② 口頭講演 (国内 22件、国際 10件)

〈国内〉

- A-1. 斉木吉隆, 江刺邦彦, 離散時間カルドアモデルのトーラスについて, Hayama Meeting VII, 湘南国際村 IPC 生産性国際交流センター, 葉山町, 2012/3/4-6.
- A-2. Rhodri Nelson, Vortex dynamics in multiply connected domains and its applications, Sakajo Shibata CREST joint seminar, 早稲田大学, 2012/3/2.
- A-3. 米田剛, 様々な惑星に存在する帯状流の純粋数学による定式化、及びそれに関連する話題について, 談話会(解析セミナー), 茨城大学, 2012/1/17.
- A-4. 米田剛, Long time solvability of equations in geophysical fluid dynamics, 「若手による流体力学の基礎方程式研究集会」, 名古屋大学, 2012/1/6.
- A-5. 米田剛, 様々な惑星に存在する帯状流の純粋数学による定式化、及びそれに関連する話題について, NLPDE セミナー, 京都大学, 2011/12/2.
- A-6. 坂上貴之, Point vortex dynamics in multiply connected domains and its applications, Computer Science Seminar, 名古屋大学, 2011/10/24.
- A-7. 坂上貴之, 多重連結領域の点渦力学, 仙台シンポジウム 2011, 東北大学, 2011/8/17.
- A-8. 坂上貴之, 渦運動の数理, 渦の特徴づけ, 北海道大学, 札幌, 2011/8/3-5.
- A-9. 坂上貴之, 多重連結領域の点渦力学とその応用, 京都大学数理解析研究所共同研究集会「オイラー方程式の数理: カルマン渦列と非定常渦運動 100 年」, 京都大学, 2011/7/20-22.
- A-10. 坂上貴之, 二次元多重連結領域の完全流体の運動, 東京大学, 東大GCOEシンポジウ

ム:致死性不整脈の機序の解明, 東京大学駒場キャンパス, 2011/6/14-16.

- A-11. 坂上貴之, 多重連結領域の点渦力学, 広島大学 数理生命分子セミナー兼数学談話会, 広島大学, 2011/5/18.
- B-1. 横山知郎, ある 2 次元発散なし流れの分類とアーノルドの枠組みにおけるテーラーの仕事について, Joint seminar with Shibata CREST, 早稲田大学, 2012/3/2.
- B-2. 荒井迅, 力学系における特異点と次元, 数理連携研究会「10 の根本問題の発掘」, 理化学研究所大河内記念ホール, 2011/12/26-29.
- B-3. 荒井迅, 周期倍分岐ふたたび, 応用数学合同研究集会, 龍谷大学瀬田キャンパス, 2011/12/15-17.
- B-4. Zin Arai, Monodromy and pruning front of the Henon map, 力学系とトポロジーのフロンティア, 京都大学数理解析研究所, 2011/11/21-25.
- B-5. 荒井迅, Conley-Morse グラフ入門, CTDS セミナー, 東京大学生産技術研究所, 2011/11/16.
- B-6. 荒井迅, 精度保証付き数値計算とその応用について, マクロ経済動学の非線形数理, 京都大学, 2011/8/29-31.
- B-7. 横山知郎, Fixed points of certain Anosov maps on Riemannian manifolds, 北海道大学幾何学コロキウム, 北海道大学, 2011/6/10.
- B-8. 横山知郎, Fixed points of certain Anosov maps on Riemannian manifolds, Emergent Dynamics in Nonlinear Science, 東京大学, 2011/5/25-26.
- B-9. 荒井迅, Monodromy and bifurcations of the Henon map, 九州力学系セミナー, 九州大学, 2011/4/19.
- C-1. 澤村 陽一, 石原 卓, Volume Penalization 法による翼果モデルまわりの流れの数値解析, 第 25 回数値流体力学シンポジウム, 大阪大学コンベンションセンター, 2011/12/19-12/21.
- C-2. 森下浩二, 石原 卓, 金田行雄, 高レイノルズ数平行平板間乱流DNSにおける小スケール統計, 平成23年度共同利用研究集会「乱流現象及び非平衡系の多様性と普遍性」, 九州大学応用力学研究所, 2011/11/10-11/12.

〈国際〉

- A-1. Takashi Sakajo, "A potential theory with point vortices in multiply connected domains with slits," Applied Mathematics Seminar, The University of Pau, フランス, 2012/3/15.
- A-2. Rhodri Nelson, "Vortex dynamics in multiply connected domains and its applications," CCS Symposium Autumn 2011, 名古屋大学, 2011/11/2.
- A-3. Takashi Sakajo, "Point vortex equilibria enhancing forces over two parallel plates," The 7th East Asia SIAM Conference (EASIAM2011), 早稲田大学北九州キャンパス, 2011/6/29.

- B-1. Zin Arai, "On compressed computations for dynamical systems," The 7th International Congress on Industrial and Applied Mathematics, Vancouver, カナダ, 2011/7/18-22.
- C-1. Koji Morishita, Takashi Ishihara, Yukio Kaneda, "The structure of the vorticity field in the near-wall region of turbulent channel flow at high-Reynolds number," APS 64th Annual DFD Meeting, 2011/11/21.
- C-2. Takashi Ishihara, Julian C.R. Hunt, Yukio Kaneda, "Strong thin shear layers in high Reynolds number turbulence," APS 64th Annual DFD Meeting, 2011/11/21.
- C-3. Takashi Ishihara, "Strong shear layers in high Reynolds number homogeneous turbulence," CCS Symposium Autumn 2011, Nagoya University, 2011/11/1.
- C-4. Naoya Okamoto, Katsunori Yoshimatsu, Kai Schneider, Marie Farge, "Intermittency of quasi-static magnetohydrodynamic turbulence: A wavelet viewpoint," 13th European Turbulence Conference, Warsaw, Poland, 2011/9/12-15.
- C-5. Takashi Ishihara, Julian C.R. Hunt, Yukio Kaneda, "Conditional analysis near strong shear layers in DNS of isotropic turbulence at high Reynolds number," 13 European Turbulence Conference, Warsaw, Poland, 2011/9/12-15.
- C-6. Koji Morishita, Takashi Ishihara, Yukio Kaneda, "Small-scale statistics in direct numerical simulation of turbulent channel flow at high-Reynolds number," 13 European Turbulence Conference, Warsaw, Poland, 2011/9/12-15.

③ ポスター発表 (国内 4件、国際 4件)

〈国内〉

- A-1. 青山直樹, Force-enhancement to two parallel plates by vortex/sink pairs, 北東数学解析研究会, 北海道大学, 2012/2/17-18.
- A-2. 坂上貴之, 渦・境界相互作用の流体モデルの構築と応用, 第2回数学領域シンポジウム, アキバプラザ, 秋葉原, 2011/9/7.
- B-1. 荒井迅, 渦・境界相互作用の力学系理論と流れ場位相解析ツールの開発, 第2回数学領域シンポジウム, アキバプラザ, 秋葉原, 2011/9/7.
- C-1. 石原卓, 渦・境界相互作用の大規模数値計算による研究, 第2回数学領域シンポジウム, アキバプラザ, 秋葉原, 2011/9/7.

〈国際〉

- B-1. Zin Arai, Hiroshi Kokubu, Ippei Obayashi, "Capturing the global behavior of dynamical systems with Conley-Morse graphs," The 3rd International Conference on Cognitive Neurodynamics, ヒルトンニセコ, 北海道, 2011/6/9-13.
- C-1. Koji Morishita, Takashi Ishihara, Yukio Kaneda, "DNS study of the small-scale

statistics in turbulent channel flow at high-Reynolds numbers,” CCS Symposium Autumn 2011, Nagoya University, 2011/11/1-2.

- C-2. Naoya Okamoto, Katsunori Yoshimatsu, Kai Schneider, Marie Farge, “Intermittency of quasi-static magnetohydrodynamic turbulence: A wavelet viewpoint,” CCS Symposium Autumn 2011, 2011.11.1-2.
- C-3. Naoya Okamoto, Katsunori Yoshimatsu, Kai Schneider, Marie Farge, “Intermittency of quasi-static magnetohydrodynamic turbulence: A wavelet viewpoint,” Turbulence Colloquium Marseille 2011, 2011/9/26-30.