Informazioni personali

Nome:	Paolo Ghiggini
Data di nascita:	23 luglio 1974
Indirizzo:	Laboratoire de Mathématiques Jean Leray
	BP 92208
	2, Rue de la Houssinière
	44322 Nantes Cedex 03
	Francia
Email:	paolo.ghiggini@univ-nantes.fr
Numero di telefono:	+33 2 51 12 59 12

Formazione

29 giugno 2004	Perfezionamento in Matematica, Scuola Normale Superiore di Pisa.
16 luglio 1998	Laurea in Matematica, Universitá di Pisa (votazione: 110/110 e lode)

Interessi di ricerca:

Topologia simplettica e di contatto, omologia di Heegaard Floer, teoria dei nodi.

Borse e posti:

1. *Chargé de Recherche de classe 1*, CNRS, Ottobre 2008 —

2. Sherman Fairchild Research Fellowship, Caltech, settembre 2007 — agosto 2008

3. Post-doc CIRGET, Université du Québec à Montréal, settembre 2005 — agosto 2007

4. Borsa "Proprietà delle varietà reali e complesse", Dipartimento di Matematica, Università di Pisa, aprile 2004 — gennaio 2004,

5. Borsa EDGE, Ludwig–Maximilians–Universität München, ottobre 2003 — maggio 2004.

Pubblicazioni

Articoli pubblicati

1. "Knot Floer homology detects genus-one fibred knots", Amer. J. Math. 130 (2008), no. 5, 1151–1169;

2. "On tight contact structures with negative maximal twisting number on small Seifert manifolds", Algebr. Geom. Topol. 8 (2008), no. 1, 381–396;

3. "Tight contact structures on some small Seifert fibred 3–manifolds", con P. Lisca e A. Stipsicz, Amer. J. Math. 129 (2007) no. 5, 1403–1447;

4. "Linear Legendrian curves in T^3", Math. Proc. Cambridge Philos. Soc. 140 (2006), no. 3, 451–473;

5. "Infinitely many universally tight contact manifolds with trivial Ozsváth–Szabó contact invariants", Geom. Topol. 10 (2006), 335–357;

6. "Ozsváth–Szabó invariants and fillability of contact structures", Math. Z. 253 (2006), no. 1, 159–175;

7. "Classification of tight contact structures on small Seifert 3–manifolds with $e_0 \geq 0$", con P. Lisca e A. Stipsicz, Proc. Amer. Math. Soc. 134 (2006), no. 3, 909–916

8. "Strongly fillable contact 3–manifolds without Stein fillings" Geom. Topol. 9 (2005), 1677–1687;

9. "Tight contact structures on Seifert manifolds over T^2 with one singular fibre", Algebr. Geom. Topol. 5 (2005), 785–833;

10. "Stability theorems for symplectic and contact pairs", con G. Bande e D. Kotschick, International Mathematics Research Notices (2004); 3673–3688.

Rendiconti di conferenze

1. "On the classification of tight contact structure", con S. Schönenberger, in "Topology and Geometry of manifolds" Proceedings of Symposia in Pure Mathematics, volume 71 (2003), editors Gordana Matić and Clint McCrory, American Mathematical Society, Providence, RI.

preprint

1. "Embedded contact homology and open book decompositions", con V. Colin e K. Honda, arXiv:1008.2734;

2. "Sutures and contact homology I", con V. Colin, K. Honda e M. Hutchings, arXiv:1004.2942;

3. "Tight contact structures on the Brieskorn spheres $-\Sigma(2,3,6n-1)$ and contact invariants", con J. Van Horn-Morris, arXiv:0910.2752;

4. " Giroux torsion and twisted coefficients", with K. Honda, arXiv:0804.1568;

5. "The vanishing of the contact invariant in the presence of torsion", with K. Honda and J. Van Horn-Morris, arXiv:0706.1602.

Visite

1. MSRI, gennaio — maggio 2010 (programma "Homology Theories of Knots and Links");

2. Aarhus Universitet, 1 settembre — 15 ottobre 2008 (professore visitatore);

3. Princeton University, marzo 2005 — aprile 2005;

4. University of Georgia at Athens, gennaio — maggio 2002 (*non degree seeking graduate student*);

5. American Institute of Mathematics, settembre — dicembre 2000 (trimestre di topologia di contatto).

1 Seminari e conferenze

1. Istanbul Contact Geometry and Topology Workshop: "Tight contact structures on the Brieskorn spheres and contact invariants", 7 — 10 giugno 2010;

2. Scuola estiva "Homologie d'entrelacs", Institut Mathématique de Jussieu: minicorso "Introduction to Legendrian knots and contact homology", 29 giugno — 3 luglio 2009;

3. Aarhus Universitet: "Contact homology for sutured contact manifolds", 17 giugno 2009;

4. Gökova Geometry / Topology Conference: "Tight contact structures on the Seifert manifolds $-\Sigma(2,3,6n-1)$", 26 maggio 2009;

5. University of Warwick: "Classification of tight contact structures on small Seifert manifolds", 12 marzo 2009;

6. Cambridge University: "Contact homology for manifold with convex boundary", 11 marzo 2009;

7. Workshop on Symplectic Geometry, Contact Geometry and Interactions, Strasburgo: "Giroux torsion, twisted coefficients, and applications", 30 gennaio 2009;

8. Institut Mathématique de Jussieu: "Applications de l'homologie de Heegaard Floer à coefficients tordus à la topologie de contact", 25 novembre 2008;

9. Institut Mathématique de Jussieu: "Homologie de Heegaard Floer homology et remplissabilité de structures de contact", 24 novembre 2008;

10. Aarhus Univeristet: "Classification of Tight Contact Structures on - $\Sigma(2,3,6n-1)$", 14 ottober 2008;

11. Conference "3-manifolds and contact topology" (Renyi Institut, Budapest): "Tight contact structures on $\Sigma(2,3,6n1)$", 29 settembre 2008;

12. Second Canada-France Congress — Session on topology, knots and related fields: "Seiberg–Witten equations on sutured manifolds", 3 giugno 2008;

13. Aarhus Universitet: "Contact Structures, Heegaard Floer Homology, and Fibred Knots", 31 gennaio 2008;

14. Aarhus Universitet: "Giroux's torsion and the contact invariant in Heegaard Floer homology", 16 agosto 2007;

15. Oporto meeting on Geometry, Topology and Physics: "Knot Floer homology, contact structures, and fibred knots", 6 luglio 2007;

16. Georgia Topology Conference: "Giroux's 2π-torsion kills the contact invariant", 16 maggio 2007;

17. ENS Lyon: "Knot Floer homology detects genus-one fibred knots", 20 marzo 2007;

18. Université de Nantes: "Knot Floer homology detects genus-one fibred knots", 19 marzo 2007;

19. Workshop in Topology (Banff International Research Station): "Contact structures, Heegaard Floer homology, and fibred knots", 1 marzo 2007;

20. VII Workshop on Symplectic and Contact Topology (University Carlos III of Madrid): "Knot Floer homology detects genus-one fibred knots", 19 agosto 2006;

21. Park City Mathematical Institute 2006: "Knot Floer homology detects genus-one fibred knots", 29 giugno 2006;

22. Conference on Topology, Geometry, and Physics In Honor of John Morgan's 60th Birthday (Columbia University), "Knot Floer homology detects genus-one fibred knots", 30 aprile 2006;

23. University of Georgia at Athens: "Tight contact manifolds with trivial Ozsváth–Szabó invariants", 12 dicembre 2005;

24. Purdue University: "Strongly fillable contact 3–manifolds without Stein fillings", 21 novembre 2005;

25. Rice University: "Ozsváth–Szabó invariants and fillability of contact manifolds", 11 aprile 2005;

26. Clay Mathematical Institute summer school "Floer Homology, Gauge Theory and Low Dimensional Topology" (Budapest): "Classification of Tight Contact structures on small Seifert manifolds with $e_0 = 0$", 16 giugno 2004;

27. Conferenze "Invariants in Low Dimensional Topology" (Budapest): "Classification of Tight Contact structures on some Seifert manifolds" 16 giugno 2003.

Insegnamento

1. Autunno 2009, Universté de Nantes: "Introduction à la topologie de contact"

2. 1 settembre — 15 ottobre 2008, Aarhus Universitet: "Introduction la topologie de contact"

3. Inverno 2008, Caltech: "Introduction to geometry and topology"

4. Autunno 2007, Caltech: "Introduction to symplectic topology"

5. Primavera 2007, UQAM: "Topologie Algébrique II"

6. Autunno 2006, McGill University (Montréal): esercitazioni per "Vectors, Matrices and Geometry"

7. Autunno 2004, Università di Pisa: esercitazioni di "Matematica I" per ingegneria chimica e energetica

8. Primavera 2003, Università di Pisa: esercitazioni di "Algebra lineare" per informatica.