CURRICULUM VITAE

PERSONAL

- **Name:** Shahab Shahabi

- **Born:** July 19, 1969 in Tehran, Iran.

- **Citizenship:** Iranian, permanent resident of Canada.

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- **Address(1):** The Fields Institute for Research in Mathematical Science,
  222 College Street (room 440), Toronto,
  Ontario, M5T 3J1, Canada. (until December 31st, 2008)

- **Address(2):** Department of Mathematics and Statistics,
  McGill University, 805 Sherbrooke St. West,
  Montréal, Québec, H3A 2K6, Canada.

EDUCATION

- Ph.D. Mathematics, McGill University, 2008.

- M.Sc. Mathematics, University of Lethbridge, 2003.

- M.Sc. Mathematics, University of Tehran, 1994.

- B.Sc. Mathematics, University of Tehran, 1992.

THESES

- p-Adic Deformation of Shintani Cycles, Ph.D. Thesis, Department of Mathematics and Statistics, McGill University, 2008, under direction of H. Darmon.

- On Non-Vanishing of Certain L-functions, M.Sc. Thesis, Department of Mathematics and Computer Science, University of Lethbridge, 2003, Under direction of A. Akbary.

- The Arithmetic of Elliptic Curves, M.Sc. Thesis, Department of Mathematics and Computer Science, University of Tehran, 1994, Under direction of R. Zaare-Nahandi.

ACADEMIC EMPLOYMENT

- Postdoctoral Fellow, Fields Institute, July 2008 — December 2008.

- Postdoctoral Fellow, CRM (Montréal), January 2009 — June 2009.

RESEARCH

- **Research Interest**

  - Elliptic Curves, Modular Forms, Special values of L-functions.

- **Work Published**

  - A. Akbary and S. Shahabi, On Non-Vanishing of Convolution Of Dirichlet Series, Canad. Math. Bull. Vol. 48(3), 2005 pp. 321-332.
  - A. Akbary and S. Shahabi, On Non-Vanishing of Symmetric Square L-Functions, Intern. Math. Journal, Vol. 5(2), 2004 pp. 169-181.

- **Work Submitted**

  - p-adic Deformation of Shintani Cycles. 34 pp.

- **Work in Preparation**

  - (with Matthew Greenberg) Shintani Cycles on Shimura Curves and Stark-Heegner Points.

AWARDS

- **Academic Awards**

  - A 2007 Liftoff Fellow of Clay Mathematics Institute (deferred until 2008). **The first awardee affiliated to a non-American university.**
  - McGill Graduate Studies Fellowship, $5,000 (Cdn), Fall 2007.
  - McGill Differential Fee Waiver, $3,500(Cdn), Summer 2005.
  - McGill Differential Fee Waiver, $3,500(Cdn), Fall 2004.
  - McGill Graduate Studies Fellowship, $5,000 (Cdn), Fall 2003.

- **Teaching Awards**

  - Recognized by the Selection Committee as one of the strongest contenders for the Math. and Stat. TA Award, Fall 2007, McGill University (not awarded since no one is eligible to receive the award more than two times!)
  - One of the two recipients of Math. and Stat. TA Award, Fall 2006, McGill University.
  - One of the two recipients of Honorable Mention for Math. and Stat. TA Award, Fall 2005, McGill University.
  - One of the two recipients of Math. and Stat. TA Award, Fall 2004, McGill University.

- **Competition Awards**

  - Third ranked person in the Iranian Master of Science Entrance Examination in mathematics (nationwide), 1992.
  - First ranked person in the Algebra area of the 16th Iranian Mathematics Competition for undergraduate students, 1992.
  - Fourth (overall) prize winner in the 16th Iranian Mathematics Competition for undergraduate students, 1992.
  - Third ranked person in the Analysis area of the 14th Iranian Mathematics Competition for undergraduate students, 1990.
  - Fifth (overall) prize winner in the 14th Iranian Mathematics Competition for undergraduate students, 1990.

TEACHING EXPERIENCE AND EMPLOYMENT

- McGill University, Instructor and Teaching Assistant.

  - Undergraduate courses taught at McGill University:
    Calculus(I) (Summer 2008); Calculus(II) (Winter 2007, Summer 2007 and Winter 2008); Calculus(III) (Summer 2008); Ordinary Differential Equations and Linear Algebra (Summer 2005 and Summer 2006).
  - Teaching assistantship at McGill University:
    Algebra(I) (Fall 2004, Fall 2005 and Fall 2006); Analysis(I) (Fall 2007); Calculus(II) (Winter 2004, Summer 2004 and Winter 2006); Calculus B (Winter 2005).

- University of Tehran, Instructor and Teaching Assistant.

  - Undergraduate courses taught at the University of Tehran (1994–2002):
    Algebra(I),(II),(III); Analysis(I); Calculus(I),(III); Elementary Algebraic Geometry; Elementary Number Theory; Foundations of Mathematics; General Topology; Linear Algebra(I),(II).
  - Teaching assistantship at the University of Tehran (1988–1994):
    Algebra(I),(II); Analysis(I),(II); Calculus(I),(II); Combinatorics.

- Amirkabir University of Technology, Instructor.

  - Undergraduate courses taught at Amirkabir University of Technology (1995–1996):
    Analysis(II),(III); Combinatorics; Linear Algebra(I).

- Imam Khomeini University, Instructor.

  - Undergraduate courses taught at Imam Khomeini University (1996):
    Algebra(I); Complex Variables.

- University of Lethbridge, Teaching Assistant.

  - Teaching assistantship at the University of Lethbridge (2002–2003):
    Linear Algebra (Summer 2003); Complex Analysis (Winter 2003);
    Foundations of Geometry (Fall 2002).

PRESENTATIONS

- **Invited Talks**

  - p-adic deformation of Shintani cycles; Québec-Vermont Number Theory Seminar, Concordia University, Winter 2008.

- **Seminars**

  - The congruent number problem, elliptic curves and modular forms; ISM Graduate Student Seminar, McGill University, Winter 2008.
  - ℓ-adic Galois representations attached to eigenforms with Nebentypos; p-adic Analysis Seminar, McGill University, Fall 2007.
  - p-adic L-functions attached to Dirichlet characters; p-adic Analysis Seminar, McGill University, Fall 2007.
  - Toward the construction of $\mathbb{C}_p$; Seminar Course, Concordia University, Fall 2004.
  - Finite extensions of $\mathbb{Q}_p$ (unramified, totally ramified,...); Seminar Course, Concordia University, Fall 2004.
  - Functional equation (local case); Tate's Thesis Seminar, Université de Montréal, Fall 2004.
  - Additive and multiplicative characters of Adéles and Idéles; Tate's Thesis Seminar, Université de Montréal, Fall 2004.
  - Gauss sums, Jacobi sums and Weil conjectures; Seminar on Cohomology Theories, McGill University, Winter 2004.

- **Course Presentations**

  - Classical modular forms as automorphic forms on $\mathbf{GL_2}$ of Adéles; Course Presentation, Concordia University, Winter 2007.
  - p-adic modular forms and p-adic families of such à la Serre (I), (II); Course Presentation, McGill University, Fall 2006.
  - Elliptic curves over $\mathbb{C}$; Course Presentation, McGill University, Winter 2005.

- **Miscellaneous Talks**

  - Mersenne primes and Lucas's criterion; Asraneye Riyazi[1], University of Tehran, 2000.
  - Dedekind zeta-function; Asraneye Riyazi, University of Tehran, 1999.
  - On the number of zeros of real polynomials; Asraneye Riyazi, University of Tehran, 1998.
  - Baire's category theorem and some applications; Asraneye Riyazi, University of Tehran, 1997.
  - p-adic valuations and Ostrowski theorem; Asraneye Riyazi, University of Tehran, 1996.
  - Weil conjectures for elliptic curves; Math. Weekly Seminar, University of Tehran, 1996.
  - On generalisations of Cauchy–Schwarz inequality: a case study; Asraneye Riyazi, University of Tehran, 1995.
  - Fermat's Last Theorem, from conjecture to certainty; Math. Weekly Seminar, University of Tehran, 1994.
  - $\mathbb{R}$ and $\mathbb{R}^2 = \mathbb{C}$: the Artin–Schreier theorem; Asraneye Riyazi, University of Tehran, 1993.
  - Elliptic curves (I), (II); Math. Weekly Seminar, University of Tehran, 1993.
  - Representations of integers as sums of squares; Math. Weekly Seminar, University of Tehran, 1990.

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[1] "Mathematics gathering with afternoon–tea".

SERVICE

- **Supervisor**

  - The supervisor of several high school summer projects, 1997–2000.

- **Coach**

  - The coach of the University of Tehran's Team in the Iranian Mathematics Competition for undergraduate students, 1997–2002.
  - The coach of the Farzanegan High School's Team in the Iranian Mathematical Olympiad for high school students, 1997–2000.

- **Organizer**

  - The organizer of a mathematical activity named in Persian "Asraneye Riyazi" with the lateral meaning "mathematics gathering with afternoon–tea", University of Tehran 1992–1998.
  - The co-organizer of the number theory graduate student seminar, McGill University, Fall 2007.

- **Editor on Board**

  - A member of the editorial board of "Jung-e-Riyazi"[2], a mathematical journal published (in Persian) by a body of students, University of Tehran, 1992–1993.

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[2] "mathematics gallery".