

# APPROXIMATION AND LEARNING IN HIGH DIMENSIONS WORKSHOP

Texas A&M University, College Station, Texas, October 19–21, 2007

## ORGANIZING COMMITTEE

Ron DeVore (University of South Carolina)  
Vladimir Koltchinskii (Georgia Institute of Technology)  
Francis Narcowich (Texas A&M University)  
Guergana Petrova (Texas A&M University)  
Bojan Popov (Texas A&M University)  
Steve Smale (UC Berkeley & TTIC)  
Joe Ward (Texas A&M University)  
Joel Zinn (Texas A&M University)

## CONFIRMED PARTICIPANTS

1. Yuliya Babenko (Sam Houston State University); Research interests: Numerical Analysis, Computer Aided Design, Approximation Theory, Spline Theory, Discrete Geometry.
2. Mohamed-Ali Belabbas (Harvard University); Research interests: Control theory, Statistical Signal Processing, Machine Learning.
3. Peter Binev (University of South Carolina); Research interests: approximation theory, learning theory.
4. Sergiy Borodachov (Georgia Institute of Technology); Research interests: Approximation theory, minimal energy problems, quantization problems.
5. Stephane Boucheron (Universite Denis Diderot, Paris); Research interests: statistics, concentration inequalities.
6. Gilles Blanchard (Fraunhofer FIRST); Research interests: machine learning, learning theory, statistics.
7. Albert Cohen (Universite Pierre et Marie Curie, Paris); Research interests: approximation theory, wavelets, signal processing, computational harmonic analysis.
8. Ingrid Daubechies (Princeton University); Research interests: time-frequency analysis (in particular, wavelets) and applications, learning theory.
9. Ron DeVore (University of South Carolina); Research interests: approximation theory, wavelets, signal processing.
10. Nira Dyn (Tel-Aviv University); Research interests: approximation theory, geometric

modeling.

11. Yalchin Efendiev (Texas A&M University); Research interests: multiscale simulations, statistical estimation, numerical analysis.

12. Ed Fuselier (ARMY); Research interests: approximation theory, radial basis functions and their applications, divergence-free and curl-free positive definite functions.

13. Yehoram Gordon (Texas A&M University); Research interests: functional analysis, approximation probability.

14. Maya Gupta (University of Washington); Research interests: theory and application of statistical estimation and classification, image processing, information theory, and color vision.

15. Thomas Hangelbroek (Texas A&M University); Research interests: approximation theory, learning theory, scattered data approximation, splines.

16. Mark Iwen (University of Michigan) Research interests: Fast Approximation Algorithms, Numerical Methods for Differential Equations, Spectral Methods, Bioinformatics, AI Planning, Medical Imaging.

17. Lee Jones (University of Massachusetts Lowell); Research interests: probability, mathematical statistics, neural networks and pattern recognition.

18. Gerard Kerkycharian (Universite Pierre et Marie Curie, Paris); Research interests: learning theory, statistics, wavelets.

19. Vladimir Koltchinskii (Georgia Institute of Technology); Research interests: probability theory and mathematical statistics.

20. Sergei Konyagin (Moscow State University); Research interests: analysis, approximation theory, learning theory.

21. Peter Kuchment (Texas A&M University); Research interests: partial differential equations and mathematical physics, computerized tomography and non-destructive testing, geometric analysis.

22. Jian-ao Lian (Prairie View A&M University); Research interests: wavelets, signal processing, computer-aided geometric design.

23. Runchang Lin (Texas A&M International University); Research interests: Numerical Analysis and Applied Mathematics.

24. Sayan Mukherjee (Duke University); Research interests: Computational biology, Statistical learning, Laplacian statistics.

25. Francis Narcowich (Texas A&M University); Research interests: approximation theory, radial and related basis functions, wavelets.

26. Dmitry Panchenko (Texas A&M University); Research interests: probability theory,

spin glass models.

27. Guergana Petrova (Texas A&M University); Research interests: approximation theory, numerical analysis.

28. Dominique Picard (Universite Paris VI); Research interests: statistics, approximation theory, computational harmonic analysis.

29. Tomaso Poggio (MIT); Research interests: learning theory, computational neuroscience.

30. Bojan Popov (Texas A&M University); Research interests: approximation theory, numerical analysis.

31. Philippe Rigollet (Georgia Institute of Technology); Research interests: nonparametric statistics, statistical learning theory.

32. Amos Ron (University of Madison); Research interests: approximation theory, wavelets, Gabor systems, splines, polynomial interpolation, data representation, frames, scientific data, applications.

33. Lorenzo Rosasco (University of Genoa); Research interests: learning theory, inverse problems.

34. Thomas Schlumprecht (Texas A&M University); Research interests: Functional Analysis, Probability Theory, Convex Geometry and Mathematics in Finance.

35. Christoph Schwab (ETH, Zurich); Research interests: numerical analysis, algorithms, approximation theory.

36. Steve Smale (UC Berkeley, Toyota Technological Institute); Research interests: algorithms, numerical analysis, global analysis.

37. Ingo Steinwart (Los Alamos National Laboratory); Research interests: machine learning, pattern recognition.

38. Vladimir Temlyakov (University of South Carolina); Research interests: approximation theory, integral operators.

39. Alessandro Verri (Universita degli Studi di Genova); Research interests: learning theory.

40. Joe Ward (Texas A&M University); Research interests: approximation theory, radial and related basis functions, wavelets.

41. Rachel Ward (Princeton University); Research interests: time-frequency analysis and applications, learning theory.

42. Patrick Wolfe (Harvard University); Research interests: probabilistic modeling, machine learning.

43. Qui Wu (University of Texas at Austin); Research interests: Optimization, inverse

problem and image analysis.

44. Ming Yuan (Georgia Institute of Technology); Research Interests: data mining and machine learning, bioinformatics and computation biology, nonparametric and semiparametric statistical methods, Bayesian and empirical Bayes methods.

45. Ding-Xuan Zhou (City University of Hong Kong); Research interests: learning theory, wavelet Analysis, approximation theory.

46. Joel Zinn (Texas A&M University); Research interests: probability, empirical processes, limit theorems, probability inequalities.