BIOGRAPHICAL SKETCH

HARRELL, EVANS M. II................Associate Chair for Graduate Studies and Research
     School of Mathematics
     Georgia Institute of Technology
     Atlanta GA 30332-0160
     harrell@math.gatech.edu
     http://www.math.gatech.edu/~harrell/
     tel.: 404 894 4312
     fax: 404 894 4409

Educational Background:

B.S.	1972	Stanford University	Physics
Ph.D.	1976	Princeton University	Mathematical Physics

Employment History:

Assistant Professor (phys.)	Haverford College	1976-1977
Visiting Professor (phys.)	University of Vienna	1977-1978
NSF National Needs Fellow (math.)	Mass. Inst. of Tech.	1978-1979
Assistant Professor (math.)	Johns Hopkins Univ.	1979-1983
Alfred P. Sloan Fellow	Georgia Inst. of Tech.	1983-1985
Professor (asst., assoc., full, ten.)	Georgia Inst. of Tech.	1983-present
Visitor	Univ. Toulon, Luminy (France)	May-Jun., 1993
Visitor	Schrödinger Inst. (Austria)	Nov-Dec., 1993
Visitor	Schrödinger Inst. (Austria)	May, 1998
Visiting Professor	Univ. of Rennes (France)	June, 1998
Researcher (Chercheur)	Centre Natl. Recherche Sci. (France)	AY 1998-99

Five Publications Closely Related to the Proposed Project

Evans M. Harrell II, Commutators, eigenvalue gaps, and mean curvature in the theory of Schrödinger operators, preprint 2003 (math.SP/0312372 at arXiv.org)

Qiang Chen, Evans M. Harrell II, and Jamed D. Meindl, A Physical Short-Channel Threshold Voltage Model for Undoped Symmetric Double-Gate MOSFET's, *IEEE Transactions on Electron Devices* **50**(2003)1631-1637.

Jacqueline Fleckinger, Evans M. Harrell II, and François de Thélin, Asymptotics for solutions of some nonlinear partial differential equations on unbounded domains, *Electronic Journal of Differential Equations* **2001**(2001) No. 77, pp. 1-14.

Pavel Exner, Evans M. Harrell II, and Michael Loss, Optimal Eigenvalues for some Laplacians and Schrödinger Operators depending on Curvature, pp. 47-58 in: Mathematical Results in Quantum Mechanics, J. Dittrich, P. Exner, M. Tater, eds. Basel: Birkhäuser, 1999.

Evans M. Harrell II, Pavel Kröger, and Kazuhiro Kurata, On the placement of an obstacle or a well so as to optimize the fundamental eigenvalue, *SIAM J. Math. Analysis* **33**(2001)240-259.

Five Other Publications by Harrell

Evans M. Harrell II and Joachim Stubbe, On Trace Identities and Universal Eigenvalue Estimates for Some Partial Differential Operators (with J. Stubbe), *Trans. Amer. Math. Soc.,* **349**(1997)1797-1809.

Evans M. Harrell II and Michael Loss, On the Laplace operator penalized by mean curvature, *Commun. Math. Phys.* **195**(1998)643-650.

Evans M. Harrell II, A direct proof of a theorem of Blaschke and Lebesgue, *J. Geom. Anal.* **12**(2002), 81-88.

E.B. Davies and Evans M. Harrell II, Conformally Flat Riemannian Metrics, Schrödinger Operators, and Semiclassical Approximation, *J. Diff. Eq.* **66**(1987)165-188.

Translator of the four-volume textbook series, *A Course in Mathematical Physics*, by W. Thirring. (Most recent edition, 1997)

Collaborators in the last 48 months (see also Ph.D. students)
 Bowman, Keith, Georgia Institute of Technology
 Chen, Qiang, Georgia Institute of Technology
 de Thélin, François, Université Paul Sabatier, France
 Exner, Pavel, Nuclear Physics Institute, Rez, Czech Republic
 Fleckinger, Jacqueline, Université de Toulouse 1, France
 Herod, James V., Georgia Institute of Technology
 Kröger, Pawel, Universidad de Valparaiso, Chile
 Kurata, Kazuhiro, Tokyo Metropolitan University, Japan
 Loss, Michael, Georgia Institute of Technology
 Meindl, James, Georgia Institute of Technology

Ph. D. Students Supervised:
 Roman Svirsky, 1985
 Glenn E. James and Dale T. Smith, 1990
 Edward Green, 1991
 Patricia L. Michel, 1994
 W. Richard O'Connell and Xue-Feng Yang, 1998

Postdoctoral Scholars Supervised
 None

Harrell's Graduate and Postgraduate Advisors
 Simon, Barry, now at California Institute of Technology
 Thirring, Walter, Universität Wien, Austria
 Guillemin, Victor, Massachusetts Institute of Technology