

Citizenship : U.S.A., U.K.

Phone : (281)-795-1172

E-mail :

nicholas.maxwell@gmail.com

namaxwell@uh.edu

Mailing address :

9502 Steep Bank Passage,  
Missouri City, TX, 77459

## Education

**B.S. Physics**, 2009, U. of H.

**B.S. Mathematics**, 2009, U. of H. (GPA: 3.4, last 60 hours )

**Graduate School in Mathematics**, 2009 - present, U. of H (GPA: 3.2 ).

## Research

**Graduate student**, fall 2009 - present, under Dr. B. G. Bodmann & Dr. Donald Kouri

Solutions of the general acoustic wave equation via methods from stochastic differential equations.

Solutions of the general elastic wave equation via propagator based methods.

**Undergraduate research assistant**, fall 2008 - summer 2009, with Dr. Donald Kouri

Quantum mechanical eigenvalue problems applied to several original research projects.

Propagator-based approaches to solving the acoustic wave equation, for specific application in the seismic industry.

### Main interests

Computation, signal analysis, computer science.

### General interests

Electrodynamics, mathematical and statistical physics, quantum theory.

Functional analysis, linear algebra, P.D.Es, electrical engineering, programming.

## Work History

**Erdos Miller**, July 2009 - present

Research consultant: Applied physics and signal analysis.

**ION Geophysical**, May 2005 - sept. 2008

Engineering intern.

**CGG Veritas**, 2006 - 2008

Contracted engineering and drafting work.

**Precision Tube Technology**, 2004 - 2005

Q.C. tech.

## Publications

D. J. Kouri, T. Markovich, N. Maxwell, B. G. Bodmann, The Heisenberg-Weyl Algebra on the Circle and a Related Quantum Mechanical Model for Hindered Rotation, *J. Phys. Chem. A* *113*, 7698-7705, (2009).

D. J. Kouri, T. Markovich, N. Maxwell, E. Bittner, Supersymmetric Quantum Mechanics for a General Family of Anharmonic Oscillator Models, *J. Phys. Chem. A*, submitted (2009).