Kraig J. Andrews

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Information Detroit, MI 48201

 $+1\ 248-798-9388$

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EDUCATION

Wayne State University, Detroit, MI

Ph.D., Physics, *Expected:* Fall 2018, GPA: 3.50/4.00

• Thesis Topic: "Intrinsic Channel Properties, Scattering Mechanisms, and Quantum Transport Properties in Transition Metal Dichalcogenides"

• Advisor: Zhixian Zhou, Ph.D

Michigan State University, East Lansing, MI

B.S., Physics, May 2014, GPA: 3.25/4.00

B.S., Astrophysics, May 2014

RESEARCH EXPERIENCE

Graduate Research Assistant

May 2015-Present

Nano Fabrication and Electron Transport Laboratory,

Department of Physics and Astronomy,

Wayne State University

Supervisor: Zhixian Zhou, Ph.D.

Undergraduate Research Assistant

Feb 2013–Dec 2013

Neutron Star Evolution and Developmental Limits,

Department of Astronomy, Michigan State University

Supervisor: Edward Brown, Ph.D

Undergraduate Research Assistant

May 2012–Jan 2013

High Resolution Array Group (HIRA): SAMURAI-TPC Project

National Superconducting Cyclotron Laboratory,

Michigan State University

Supervisors: William Lynch, Ph.D and Betty Tsang, Ph.D.

Publications

1. Chamlagain, B., Perera, M., Chuang, H.J., Bowman, A., Rijal, U., **Andrews, K.**, Klesko, J., Winter, C., Zhou, Z. "Substrate dependence of Hall and Field-effect mobilities in few-layer MoS₂ field-effect transistors." *Manuscript in preparation*, 2016.

TEACHING EXPERIENCE Teaching Assistant

Fall 2015

PHY 2130 - General Physics I

Instructor: Karur Padmanabhan, Ph.D.

Wayne State University

Teaching Assistant

Summer 2015

Fall 2014-Winter 2015

PHY 2131 - General Physics Laboratory I Instructor: Xiang-Qiang Chu, Ph.D.

Wayne State University

Teaching Assistant

AST 2010 - Descriptive Astronomy Laboratory

Instructor: Edward Cackett, Ph.D

Wayne State University

Teaching Assistant Winter 2014

PHY 0232 - Introductory Physics II Instructor: Stuart Tessmer, Ph.D

Michigan State University

Winter 2013 Teaching Assistant

AST 0208 - Planets and Telescopes Instructor: Edward Loh, Ph.D Michigan State University

Teaching Assistant

Fall 2013

PHY 0231 - Introductory Physics I Instructor: Tibor Nagy, Ph.D Michigan State University

Teaching Assistant Winter 2012

PHY 0232 - Introductory Physics II Instructor: Stuart Tessmer, Ph.D Michigan State University

HARDWARE AND Fabrication, Data Acquisition, Testing, and Measurement:

SOFTWARE SKILLS • LabView, Atomic Force Microscopy (AFM), Electron Beam Lithography, Photolithography, Computer-Aided Design (CAD), Scanning Electron Microscopy (SEM), and others

Computer Programming:

• C, C++, Fortran, GNU make, MATLAB, Mathematica, Python, UNIX shell scripting, and Visual Basic

Operating Systems:

• Microsoft Windows family, Apple OS X, Linux OS

Desktop Editing:

- TeX(LATeX, BibTeX)
- Microsoft Office, OpenOffice, LibreOffice
- GIMP, InkScape

Relevant GRADUATE Coursework

- Advanced Quantum Mechanics I & II
- Survey of Condensed Matter Physics
- Statistical Mechanics
- Electrodynamics
- Thermal Physics