Andrew J. Christlieb
Michigan State University
http://www.the-christlieb-group.org

Professional Preparation

Institution	Major/Area	Degree/Training
Univ. of Michigan-Dearborn	Mathematics	BS (1991 - 1996)
Univ. of Michigan-Dearborn	Electrical Engin.	BS (1991 - 1996)
Univ. of Michigan-Dearborn	Engin. Math	BS (1991 - 1996)
Univ. of Wisconsin-Madison	Applied Math	MS (1996 - 1998)
Univ. of Wisconsin-Madison	Mathematics	Ph.D. (1998 - 2001)
Univ. of Michigan-Ann Arbor	Aerospace Engin.	PostDoc (2001 - 2002)

Appointments

Date Start/End	Title	Institution/Location
7/15 - present	Full Prof./Chair	Departments of Computational Mathematics, Science and Engineering Michigan State University
7/14 - 7/15	Full Prof.	Departments of Mathematics and Electrical and Computer Engineering Michigan State University
7/13 - 7/14	Assoc. Prof.	Departments of Mathematics and Electrical and Computer Engineering Michigan State University
7/10 - present	Assoc. Prof.	Department of Mathematics Michigan State University
5/06 - 9/10	Assis. Prof.	Department of Mathematics Michigan State University
9/02 - 5/06	Term Assis. Prof.	Department of Mathematics University of Michigan-Ann Arbor

Five products most closely related to the project

1. A.J. Christlieb, B. Ong, J. Qiu, "Integral Deferred Correction Methods Constructed with High Order Runge-Kutta Methods", *AMS–Math. of Comp.*, 79, 761–783, 2010.
2. A.J. Christlieb, R Haynes, B. Ong, "A Parallel Space-Time Algorithm", *SIAM J. on Scientific Computing*, *SIAM J. on Sci. Comp.*, 34(5):233-248, 2012
3. M. Causley and A.J. Christlieb, "A-Stable Higher order schemes for the wave equation using a recursive convolution approach", *SIAM J. Num. Anal.*, 52(1), 220–235, 2014
4. M. Bettencourt M. Causley, A.J. Christlieb, E. Wolf, "A Particel-In-Cell Method for The Simulation of Plasmas Based on An Unconditionally Stable Field Solver" , *J. of Computational Physics*, 326, 342-372, 2016
5. AJ Christlieb, X Feng, DC Seal, Q Tang, "A high-order positivity-preserving single-stage single-step method for the ideal magnetohydrodynamic equations", *J. of Computational Physics*, 316, 218–242

Synergistic Activities

- **Conferences:** IEEE International Conference on Plasma Science (2003,2004,*invited 2005*, 2009,2011, 2012(Session Organizer), 2013(Session Organizer), 2014(TAC)), SIAM Annual Conference (2003,2006,2008,2009,2010,2012, 2014), APS Divstion of

Plasma Physics (2004,2005,2007,2008,2010,2011,2012), Gaseous Electronic Conference (2000, 2013 (ran GEC worship on test problems), 2015 invited talk) and SIAM Computational Science and Engineering (2005,2007,2009,2011, 2013, 2015, 2017). I co-orginsied a two day workshop at in March of 2008 at Michigan State University on Multi-Scale Modelingand co-orginsied of IPAM workshop on Dense Plasmas Spring 2012.

- **Mentoring:** I Co-Advised 3 grad students who got their PhD while at University of Michigan, and have Advised more 8 PhD students, and 1 MS students since being at MSU and Co-Advised another 2 MS students with engineering. I have advised 7 post docs who have taken academic jobs at research institutions in the US and Europ. I am currently advising 6 graduate students and 4 post docs.

- **Collaboration/Recognition:** Dr. Christlieb has collaborated with the Air Force Research Labs (AFRL) since 2005. He has worked with Dr. Andy Greenwood of AFRL-Kirtland RDHE and Dr. Jean-Luc Cambier AFRL-Edwards PRSA on the development of grid-free particle methods. In recognition of his work, Dr. Christlieb received the 2007 AFOSR – **Young Investigator Award**. Further, Dr. Christlieb is funded as an IPA by AFRL RDHE to provide guidance on algorithm development. In 2008, AFORS invited Dr. Chrisltieb as one of 10 scientist to represent AFOSR in there external review. Further, in 2008, AFOSR and ONR invited Dr. Chrisltieb to give one of the four lectures in the 2008 young investigator series. **In 2014, named University Foundational Professor of Mathematics** at Michigan State University.

Collaborators over the last five years: Wei Guo, Aditya Viswanathan, Yan Jiang, David Seal, Yaman Guclu, Matt Causley, Zhengfu Xu, Benjamin Ong, Jingmei Qiu, Hana Cho, Rahuma Chowdhury, Mayur Jain, Eric Wolf, Qi Tang, Scott Harold, Jaylan Jones, Lee VanGroningen, David Lawlor, Maureen Morton, Hyoseon Yang, Firat Cakir, Mathialakan Thavappiragasam, Ruochuan Zhang, Gautham Dharuman, Michael Crockatt, Xiao Feng, Bosu Choi, Brian O'Shea, Michael Murillo, Cory Hauck, John Verboncoeur, W. Nick Hitchon, Keith Promislow, Brian Wetton, Yingda Chen, James Rossmanith, Yang Wang, Mark Iwen, Ron Hayes, Bryan Quaife, Sigal Gottlieb, Matt Bettencourt, Keith Cartwright, Andrew Greenwood, Philip Grete.