Marc Henry de Frahan

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Education

2011-present **Ph.D. in Mechanical Engineering**, *University of Michigan*, Ann Arbor, MI.
Research focus: Hydrodynamic instabilities in high energy density physics.
Advisor: Prof. E. Johnsen.

2009-2011 **M.S. in Applied Mathematics Engineering**, *Université Catholique de Louvain*, Belgium, completed with *Grande Distinction*.
Specialization: Numerical simulation and modeling.
Thesis title: Implementation of a Discontinuous Galerkin Method for hyperbolic PDEs on GPUs. *Thesis supervisors:* Dr. J-F Remacle, Dr. P. Chatelain, Dr. V. Legat.

Fall 2010 **Study abroad semester**, *Inst. Nat. des Sciences Appliquées de Toulouse*, France.

2007-2009 **B.S. in Applied Mathematics Engineering**, *Université Catholique de Louvain*, Belgium, graduated with *Distinction*. *Minor:* Physics.

2006-2007 **Freshman year Physics major**, *Georgetown University*, Washington D.C, USA.

Relevant experience

Summer 2010 **Student Intern**, *Lawrence Livermore National Lab.*, Livermore CA, USA.
Studied hydrodynamic instabilities in inertial confinement fusion targets. Characterized growth factors during capsule compression. *Supervisors*: Dr. L. Suter and Dr. D. Clark.

Summer 2009 **Student Intern**, *Lawrence Livermore National Lab.*, Livermore CA, USA.
Studied hot electron signatures and capsule preheat in the context of inertial confinement fusion as developed at the National Ignition Facility. *Supervisors*: Dr. L. Suter and Dr. C. Thomas.

Summer 2008 **Student Intern**, *Lawrence Livermore National Lab.*, Livermore CA, USA.
Studied and optimized National Ignition Facility inertial confinement fusion target geometries using view factor calculations. *Supervisors*: Dr. L. Suter and Dr. C. Thomas.

Languages

English	**fluent**	*First mother tongue.*
French	**fluent**	*Second mother tongue.*
Dutch	**proficient**	*6 years in secondary school.*

Computer skills

Scientific programing: C/C++, C for CUDA, Hydra, Yorick, ITS Monte-Carlo Codes, OpenMP, MPI, Matlab, Python, Gambit/Fluent, Patran/Nastran

Operating systems: GNU/Linux, Windows