

Mission

The Center's mission is to support the Material Measurement Laboratory's mission in materials measurement and data delivery by:

- developing, solving, and quantifying materials models using state-of-the-art computational approaches;
- creating opportunities for collaboration where CTCMS can make a positive difference by virtue of its structure, focus, and people;
- developing powerful new tools for materials theory and modeling and accelerating their integration into industrial research.

Active Working Groups

- [Diffusion Working Group on High Throughput Analysis of Multicomponent Multiphase Diffusion Data](#) [1]
- [OOF: Object-Oriented Finite Element Analysis of Real Material Microstructures Working Group](#) [2]
- [FiPy: A Finite Volume PDE Solver Using Python](#) [3]
- [Interatomic Potential Repository Project](#) [4]
- [Micromagnetic Modeling \(muMAG\) Working Group](#) [5]
- [The Materials Digital Library](#) [6]

Working Group Archives

- [Solder Interconnect Geometry and Reactive Wetting code archive](#) [7]
- [Phase Field Modeling Tools simulation archive](#) [8]

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[Phase Field](https://mml.nist.gov/mml/images/phase_field_2.jpg)

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Links

- [1] <http://www.nist.gov/mml/ctcms/diffusion/index.cfm>
- [2] <http://www.ctcms.nist.gov/oof/>
- [3] <https://mgi.nist.gov/fipy>
- [4] https://mgi.nist.gov/atomistic_potentials-nanomaterials_metrology
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