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## Updates on QuickPIC Open Source

*Tuesday, September 17, 2019 4:40 PM (20 minutes)*

QuickPIC is a 3D parallel quasi-static PIC code for efficiently simulating the plasma based accelerator (PBA). It is developed based on the framework UPIC. QuickPIC has been widely used and played an important role in studying PBA problems. In 2017, we made QuickPIC an open source code on Github (<https://github.com/UCLA-Plasma-Simulation-Group/QuickPIC-OpenSource>). The open source QuickPIC was written in an object-oriented way using Fortran 2003. Recent development of QuickPIC will be introduced in this presentation including the field ionization module, the laser module and 2D QuickPIC in r-z cylindrical coordinates.

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