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## Linear accelerator simulation code AVAS

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A new accelerator simulation code named Advanced Virtual Accelerator Software (AVAS) was developed by the Institute of Modern Physics, Chinese Academy of Science. Although the code is proposed to simulate the particle transport in the linac of the China Initiative Accelerator Driven System (CiADS), it can be also used for common linacs. The code is based on particle-in-cell (PIC) algorithm and implemented in the C++ language. All accelerator elements as well as algorithms are packaged into an executable program, which can be run after installation on the windows operating system. Due to a variety of optimization and parallel schemes, AVAS greatly reduces the time required for linac simulations. Next, more usable elements and graphical interfaces will be added.

### Funding Agency

### Footnotes

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Yes

**Primary authors:** JIN, Chao (Institute of Modern Physics, Chinese Academy of Sciences); QI, Xin (Institute of Modern Physics, Chinese Academy of Sciences); WANG, Zhijun (Institute of Modern Physics, Chinese Academy of Sciences); HE, Yuan (Institute of Modern Physics, Chinese Academy of Sciences)

**Presenter:** JIN, Chao (Institute of Modern Physics, Chinese Academy of Sciences)

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