Abstract for an Invited Paper for the HAW05 Meeting of The American Physical Society

## Particle Therapy with use of Accelerators

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In many countries, cancer is the largest fraction of mortality and overcome of this disease is one of the most important subjects in health of mankind. Nowadays, medical application of nuclear physics has been developed in many branches. Among those, the cancer treatment with use of particle accelerator is the most prominent development. There are two streams in charged particle therapy, either proton or heavy ion therapies. In many institutions, medical treatments on charged particle therapy are ongoing, and in addition new facilities for medically dedicated accelerator are under construction. In my presentation, starting from principles of methodology in this science and technology for medical application, the overview on present status of their activities and research works for advancement toward future will be described.