## MASTER'S TALK

## KOTARO KAJITA

Title : Fractional Moment Method for Localization.

**Abstract :** The Anderson model is a random Schrödinger operator introduced by physicist P.W. Anderson in 1958. One of the key phenomenon that arise from this model is Anderson localization; if sufficient randomness is present in a material then there is suppression of electron transport. Mathematically, we say that the model exhibits *dynamical localization* if the solution to the random Schrödinger equation is localized in space, uniformly for all time. I will be presenting the fractional moment method proof of localization developed by M.Aizenman and S.Molchanov in 1993. The method shows that for sufficiently large disorder the Anderson model is localized in the entire spectrum.