

**Peter Pickl**

*Mean Field Limits in Quantum systems*

I shall present a new strategy for handling mean field limits of quantum mechanical systems. The new method is simple and effective. It is simple, because it translates the idea behind the mean field description of a many particle quantum system directly into a mathematical algorithm. It is effective because the strategy yields with lesser effort better results than previously achieved. As an instructional example I treat a simple model for the time dependent Hartree equation which can be derived under more general conditions than what has been considered so far. Other mean field scalings leading e.g. to the Gross-Pitaevskii equation can also be treated.