### ANNOUNCEMENT

After having learned quite a lot about Lie groups, Lie algebras and their representation theory, it would be nice to see, where all this knowledge is put to use in physics. It might also be nice, to learn a bit about where finite groups appear in physics. To fill this gap, I will offer a seminar in the winter term 2010/11, which is entirely devoted to just these topics. Possible suggestions for talks are:

**[1]** The Lorentz group, its representation theory and its meaning for (quantum) field theories.

**[2]** The PCT theorem and the spin-statistics theorem as corner stones of quantum field theories as we know them.

**[3]** Spectra of elementary particles explained by representation theory of Lie algebras.

**[4]** Fundamental interactions in the light of tensor products and Young tableaux.

**[5]** What are Spinors, and what are they good for?

**[6]** Extended Dynkin diagrams and what they tell about Grand Unified Theories.

**[7]** The idea of supersymmetry in high energy physics.

**[8]** Finite groups and atomic spectra in crystals.

If you are interested in attending this seminar, please send an Email to `flohr@itp.uni-hannover.de`. Please also tell your fellow students about this seminar. Further information about the seminar, such as date, time and place, will be posted on my home page `www.itp.uni-hannover.de/~flohr`.