



The Departments of Theoretical Physics, Physics and Astronomy of Lund University, sponsored by the Gunnar and Gunnel Källén Memorial Fund of the Royal Physiographic Society, proudly present

## The Gunnar Källén Lecture 2009

### “Living with Infinities - The Contributions of Gunnar Källén, and Expectations for the Future”

by

## Professor Steven Weinberg

Friday 13 February at 15.15  
Lecture Hall A, Physics Department

#### Abstract

Quantum Electrodynamics (QED) is a theory that describes the interaction of light with matter. In its most precise test, QED gives agreement with experiment to better than one part in a trillion. Nonetheless, this marvellous theory is plagued with infinities, a malaise that inflicts also other quantum field theories relevant to physics.

The speaker will discuss some of the work of Gunnar Källén, especially regarding the problem of infinities in quantum field theory, and will recount his own interactions with him. In addition, he will deal with the current status of the problem and present his personal view on how it will be resolved in the future.

#### About the Speaker

Professor Weinberg is “considered by many to be the pre-eminent theoretical physicist alive in the world today”. He is the recipient of many awards, among them the 1979 Nobel Prize in Physics. See <http://www.ph.utexas.edu/~weintech/weinberg.html>

**The Lecture is aimed at students, teachers, researchers and interested public.**

Coffee and cake will be served before the talk, from 15.00, outside Lecture Hall A.

**Gunnar Källén**, born on 13 February 1926, was a leading Scandinavian theoretical physicist. In 1958, upon strong support by Niels Bohr, Robert Oppenheimer and Wolfgang Pauli, a “personal professorship” was created for him at Lund University, a position that he held until his untimely death in a plane accident in 1968.