



ICTP COLLOQUIUM

In Praise of Quantum Field Theory

Alexander M. POLYAKOV

Russian Academy of Sciences
L.D. Landau Institute for Theoretical Physics, Moscow and
Princeton University, Department of Physics

Abstract:

Quantum field theory provides a universal language for very different areas of physics. I will try to demonstrate this by briefly discussing some fundamental problems, solved and unsolved. The problems will include (if time permits) critical phenomena and conformal bootstrap, quark confinement and gauge/string duality, cosmological constant and turbulence and maybe more.