

IAF SYMPOSIUM ON ONGOING AND NEAR FUTURE SPACE ASTRONOMY AND
SOLAR-SYSTEM SCIENCE MISSIONS (A7)
Science Goals and Drivers for Future Exoplanet, Space Astronomy and Space Physics (2)

Author: Prof.Dr. Rauf Jafarov
Baku State University, Azerbaijan, r.g.jafarov@gmail.com

TOWARD OF THE VALUE OF THE FOUR-LINEAR CONTACT COUPLING CONSTANT OF REAL
HIGGS SCALARS IN EARLIER STADIES OF THE FORMATION OF THE UNIVERSE

Abstract

In the standart lectroweak interaction theory, the four-linear interaction coupling constant of real scalar Higgs fields is studied. Using the ladder approximation, the asymptotics of the scattering amplitude of the corresponding Higgs scalars is found through the solution of the Bethe-Salpeter integral equation in the form of the Regge asymptotics, where the Regge exponent includes the mass of the Higgs boson M , the coupling constants v of the three-line interaction of real scalar and failed Goldstone fields and four-line interaction coupling constant λ of scalar failed Goldstone fields. In this case, it is possible to determine the upper limit of values λ by a consistent value of the lower limit of Linde-Weinberg.