

"Back to the eighties"

(1)

Dear Andreas, dear all celebrating Andreas Ringwald!
It is a pleasure for me to remember the mid 80s,
(1984-1988) when Andreas got his diploma and PhD
with my guidance, in an exciting time for fundamental
physics: Cosmology and Astrophysics became important
topics also for many elementary particle physicist.
And there was much progress trying to go beyond the
Standard Model - in this period often with supersymmetric
models, my main field of research in these years, including
SUSY-instantons - strongly influenced by the CERN theory.
Already starting with his diploma thesis Andreas con-
centrated on cosmology: the question of the evolution
equations of scalar (Higgs-type) fields in an expanding
inflationary universe, the question of initial conditions.
first was his main topic. Another part was the baryon
number violation by sphaleron effects. I myself besides
from some lecturing learned a lot about the subject
discussing with Andreas frequently and very intense.
He was a brilliant student, working very hard,
fast in understanding and with new ideas - and!

(2)

also very friendly. Before his PhD he published alone few papers in wellknown journals. During his studies he followed an invitation to the Fermi-lab. for some weeks, meeting Kolb and Turner there. After his PhD in Heidelberg and freshly married Andreas went to DESY as a postdoc. Within a years time at DESY he published his fundamental paper on possibly strong effects of electroweak instantons in highly inclusive cross sections - a question which is not finally settled to my understanding. This was the starting point of a steep career, leading Andreas to CERN and then to DESY again.

Andreas, friend and "Spezialphysiker" (your words): I hope and I am very confident, that you will have many further years with fun, being active in physics - now also sometimes with experimental activities, but also with more freedom and time for other projects, for your family and - not to forget for your sailing tours!

All the best, sailing forward

Michael