

In Memoriam Prof. Gerhard Höhler

G. Höhler
died on June 4, 2014
at the age of 93



Gerhard Höhler became full professor
(Lehrstuhl für Theoretische Kern- und Teilchenphysik)
in Karlsruhe, Germany in 1960

at the same time with Herwig Schopper
(Lehrstuhl für Experimentelle Kern- und Teilchenphysik)

Herwig Schopper
on the occasion of
the 50s anniversary
in 2010

New beginning of physics with (big) bang

Several chairs at TH Karlsruhe were filled
within a few months in 1960



Buckel

1960 **Werner Buckel**, Festkörperphysik
(Nachfolger Gerthsen), **Stöckmann, Falk**
19.7.1960 **Gerhard Höhler**,
Theoretische Kern- und Teilchen Physik
22.8. 1960 **Herwig Schopper**,
Experimentelle Kern- und Teilchenphysik

HS appointed as Director of **TWO** **Instituts**
for Experimentelle Kernphysik IEKP
one at Research Center Karlsruhe FZK
the other at University

My condition: **unification of the two instituts**
,formale Zweiteilung des Instituts (TH und KFZ)
soll im wissenschaftlichen Bereich nicht in
Erscheinung treten'



Höhler

In 1960s and 1970s early work on pion photoproduction and on e.m. nucleon form factors, most cited paper on: Analysis of Electromagnetic Nucleon Form Factors Nucl. Phys. B114 (1976) 505-534 with the group of Prof. Walther in Mainz, who did the form factor experiments. He introduced the analysis of form factors and radii with dispersion relations, which is still a very high topic nowadays.

Höhler will remain the reference for dispersive analysis methods in electron scattering and also in Compton scattering for a long time. Groups in Mainz and Bonn are continuing in Höhler's spirit, since ~1995

However, Gerhard Höhler is most famous for his work on pion-nucleon scattering, dispersion relations and Baryon resonances.

Some people call him
Father of Pion-Nucleon Physics or Pion-Nucleon Pope

But many people call his famous book:

The Höhler Bible

LANDOLT-BÖRNSTEIN

Numerical Data and Functional Relationships
in Science and Technology

New Series

Editor in Chief: K.-H. Hellwege

Group I: Nuclear and Particle Physics

Volume 9

Elastic and Charge Exchange Scattering
of Elementary Particles

Supplement to Volume I/7 and Extension to High Energies

Subvolume b: Pion Nucleon Scattering

Part 2: Methods and Results
of Phenomenological Analyses

G. Höhler

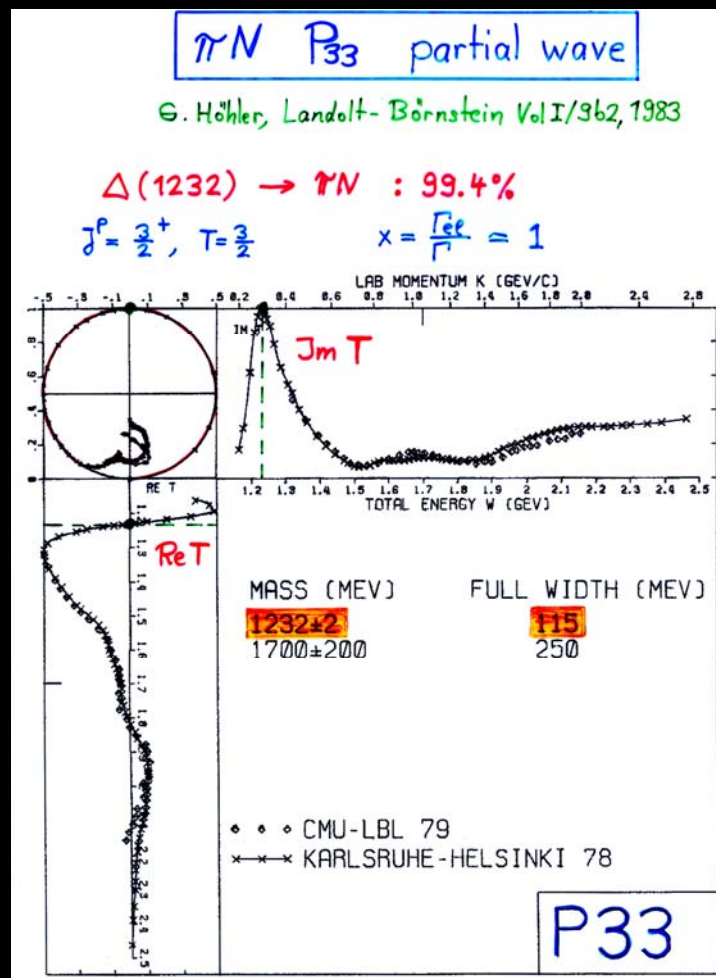
Editor: H. Schopper



Springer-Verlag Berlin · Heidelberg · New York 1983

Argand Diagram with Breit-Wigner parameters

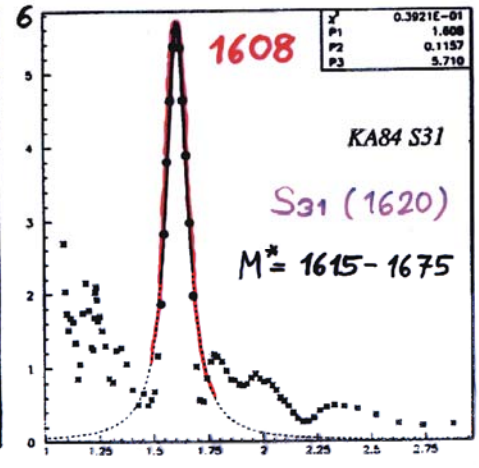
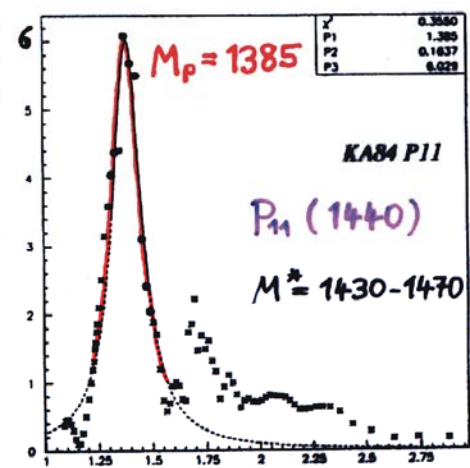
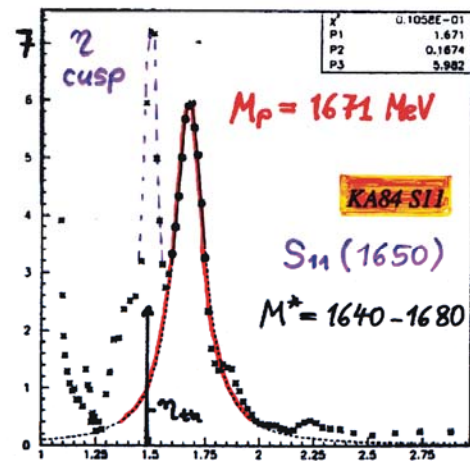
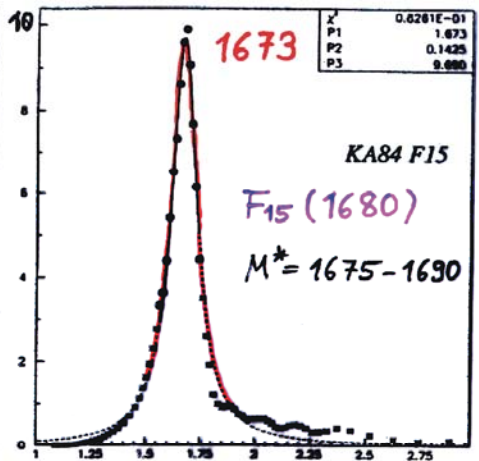
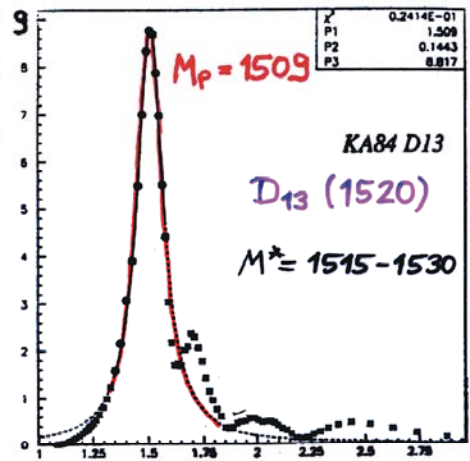
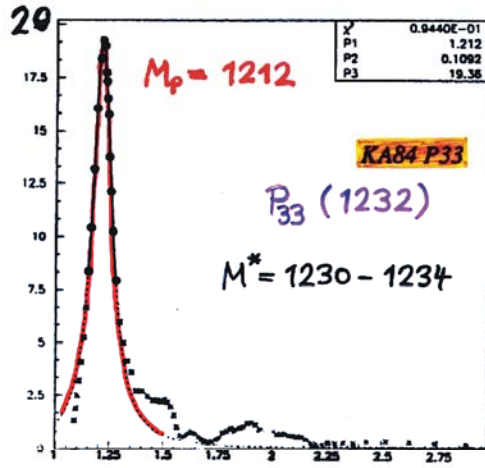
Landolt Börnstein, 1983:



Speed Plot with pole positions and residues

πN Newsletter 1992:

πN speed plots, G. Höhler, πN Newsletter 7 (1992) 94



In Baryon Particle Listings one finds:

Hoehler 79, PDAT 12-1, G. Höhler et al.
Cutkosky 80, Toronto Conf. 19

Until 2010 in Review of Particle Physics (PDG):

21 N^* resonances: Hoehler 79 reported 20 N^*

22 Δ resonances: Hoehler 79 reported 18 Δ

Höhler was a member of the Particle Data Group between 1984 - 2004

Höhler published with his colleagues 2 famous partial wave analyses:

KH80 : Karlsruhe-Helsinki

KA84 : Karlsruhe „smoothed“ analysis, which he used for speed-plots

Karlsruhe group:

Koch, Pietarinen, Staudenmaier, Stahov, and many more

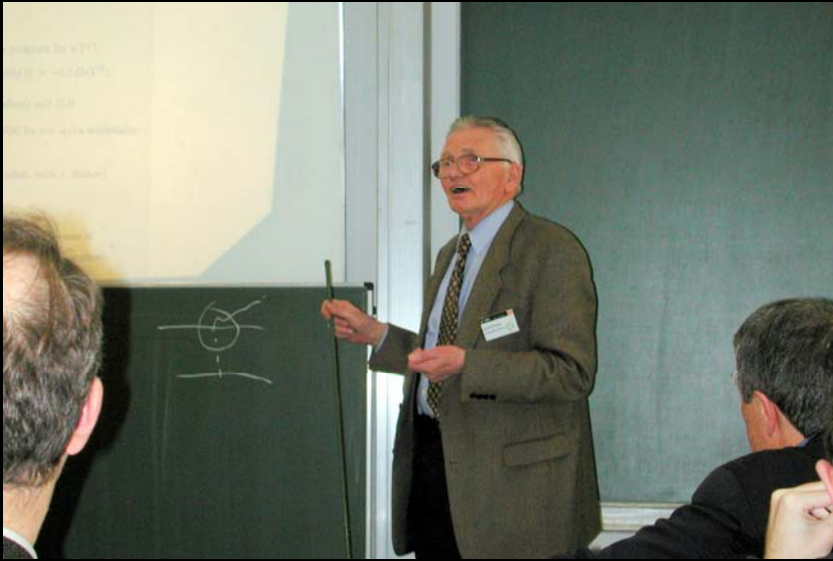
Höhler and Nefkens founded the π N Newsletter,
which published 16 volumes from 1984 – 2002
(now online available on the GWU/SAID web site)

Höhler and Nefkens also initiated the MENU Workshop series with the first workshop on pion-nucleon scattering 1983 in Karlsruhe

In 2001, July 26-31, the 9th MENU workshop was organized at GWU in Washington, DC and the proceedings were dedicated to Professor Gerhard Höhler on the occasion of his 80s birthday in September 2001

NSTAR 2001 in Mainz

7-10 March



2 good friends: Ben Nefkens and Gerhard Höhler

