

**E251/E289 ( $\Sigma$ igN) M. Ieiri**  
**Hyperon-Nucleon Scattering Experiment (I) ( $\Sigma^+$ +p Scattering)**  
**Hyperon-Nucleon Scattering Experiment (II) ( $\Sigma^+$ +p,  $\Lambda$ +p Scattering)**

**E251**

Submitted	1991.6.20
Approved	1991.7.16
Beam line	K2
Shift requested	60
Shift executed	90
Executed cycles	91[11], 92[2,3,7,9]

**E289**

Submitted	1992.11.4
Approved	1995.7.27
Beam line	K2
Shift requested	200
Shift executed	186
Executed cycles	(95[7,9,10]), 95[12], 96[1,2-2,4,5,6,7,8]

**Papers and activities**

[Legend]

- Physics papers published in refereed journal
- Technical papers
- ★ PhD theses
- ◇ Conference and Symposium
- \* Internal Report and others

- J. K. Ahn et al.  
The YN Interaction from Hyperon Scattering  
Nucl. Phys. A 585 (1995) 165c.
- J. K. Ahn et al.  
Hyperon-proton scattering experiments with a scintillating fiber detector at KEK  
Nucl. Phys. A 639 (1998) 21c.
- J. K. Ahn et al.  
 $\Sigma^+$ p elastic scattering in the region of  $300 \leq p_{\Sigma^+} \leq 600$  MeV/c with a scintillating fiber target  
Nucl. Phys. A648 (1999) 263.
- Y. Kondo et al.  
 $\Sigma^+$ p elastic scattering in the region of  $400 \text{ MeV/c} \leq p_{\Sigma^+} \leq 700 \text{ MeV/c}$  with a scintillating fiber active target  
Nucl. Phys. A676 (2000) pp.371 – 387.
- J. K. Ahn et al.  
 $\Sigma^+$ p elastic scattering cross sections in the region of  $350 \leq p_{\Sigma^+} \leq 750$  MeV/c with a scintillating fiber active target  
Nucl. Phys. A761 (2005) 41-66.
- J. K. Ahn et al.  
Active target-detector with scintillating fibers for hyperon proton scattering  
Nucl. Instr. Method A457 (2001) pp137-150.
- J. K. Ahn et al.

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- Physics papers published in refereed journal.
  - Technical papers.
  - ★ PhD theses.
  - ◇ Conference and Symposium.
  - \* Internal Report and others.

Active Target With Plastic Scintillating Fibers for Hyperon-Proton Scattering Experiments  
IEEE Trans. NS 49 (2002) pp592-596.

- ★ Y. Goto  
Measurement of  $\Sigma^+p$  Elastic Scattering with Scintillating Fiber Target  
Kyoto University, September 1996
- ★ Y. Kondo  
Measurement of  $\Sigma^-p$  Elastic Scattering Cross Sections with a Scintillating-Fiber Active Target  
Kyoto University, May 2000
- ★ H. Kanda  
Measurement of the cross sections of  $\Sigma^+p$  elastic scattering  
Kyoto University, March 2007
- ◇ J. K. Ahn et al.  
 $\Sigma^+p$  Scattering Experiment  
Proc. 10th Int. Symp. High Energy Spin Physics Nagoya, November 9-14, 1992, p697.
- ◇ J. K. Ahn et al.  
The YN interaction from hyperon scattering  
Proc. U.S.-Japan Seminar [Properties & Interactions of Hyperons] (1994) p17.
- ◇ J. K. Ahn et al.  
 $\Sigma^+p$  Scattering Experiment at KEK  
Proc. 23rd INS Int. Symp. Nuclear and Particle Physics with Meson Beams in the 1 GeV Region  
Tokyo, March 15-18, 1995, p287.
- ◇ M. Ieiri et al.  
Hyperon nucleon scattering experiment (KEK-PS E289)  
APCTP Workshop on Strangeness in Nuclear Physics (SNP 99), Seoul, Korea, 19-22 Feb 1999,  
Published in \*Seoul 1999, Strangeness nuclear physics\* 13-18
- ◇ M. Ieiri  
Hyperon-proton scattering experiment (KEK-PS E289 and plans)  
7<sup>th</sup> International Conference on Hypernuclear and Strange Particle Physics; Torino, Italy, 23-27  
October, 2000; Nucl. Phys. A691 (2001) pp.354c – 360c.

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  - Technical papers.
  - ★ PhD theses.
  - ◇ Conference and Symposium.
  - \* Internal Report and others.