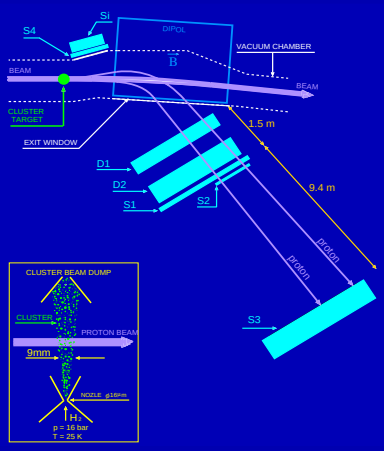
η and η' Meson Production at COSY - 11

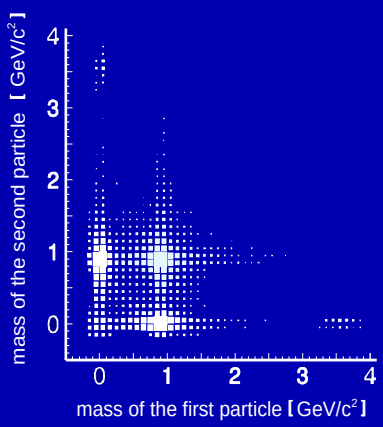
Paweł Moskal[1,2] for the COSY - 11 collaboration

1 Institute of Physics, Jagellonian University, Cracow
2 Nuclear Physics Institute, Research Centre Jülich

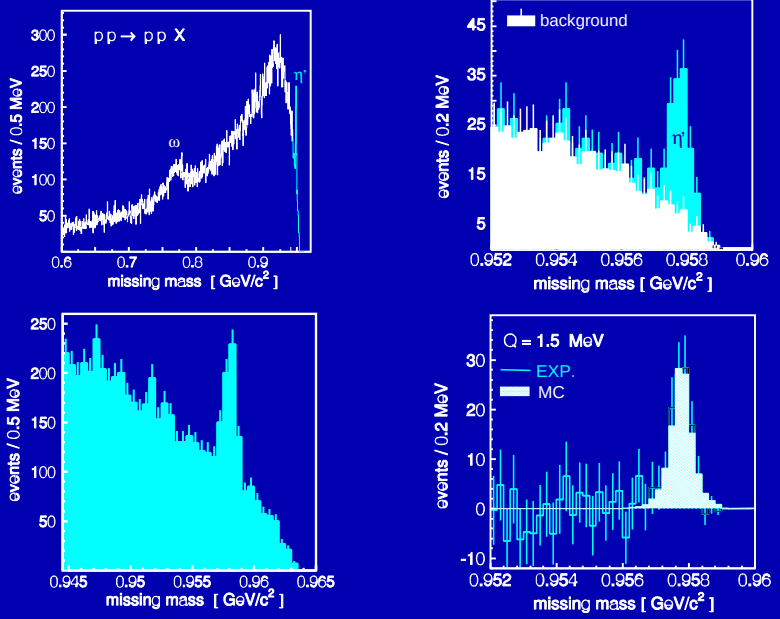
Detection system



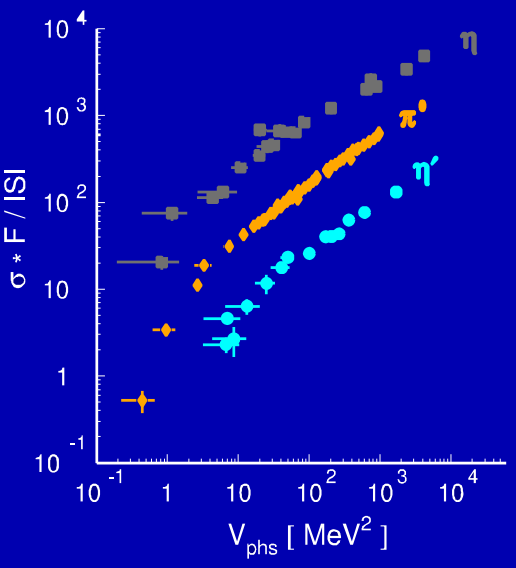
Particle identification



Missing mass method



Production yield

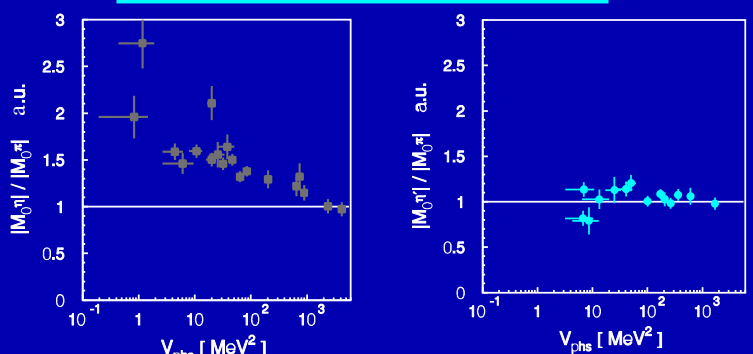


η-proton and η'-proton interaction

$$\sigma_{pp\to ppX} = \frac{\int dV_{phs}\cdot |M_{pp\to ppX}|^2}{F},$$

$$|M_{pp\to ppX}|^2 \approx |M_0|^2 \cdot |M_{FSI}|^2 \cdot ISI,$$

$$M_{FSI} \approx M_{pp\to pp}$$



Data

J. Smyrski et al., Phys. Lett. **B 474** (2000) 182.

P. Moskal et al., Phys. Lett. **B 474** (2000) 416.

F. Hibou et al., Phys. Lett. **B 438** (1998) 41.

P. Moskal et al., Phys. Rev. Lett. **80** (1998) 3202.

H. Calén et al., Phys. Lett. **B 366** (1996) 39.

A. Bondar et al., Phys. Lett. **B 356** (1995) 8.

E. Chiavassa et al., Phys. Lett. **B 322** (1994) 270.

A. M. Bergdolt et al., Phys. Rev. **D 48** (1993) R2969.

H. O. Meyer et al., Nucl. Phys. **A 539** (1992) 633.

H. O. Meyer et al., Phys. Rev. Lett. **65** (1990) 2846.