

Mike Seidel on Vacuum Issues 9.9.2005

- Pressure of 1×10^{-5} not a problem for Undulator radiation damage due to electron-gas scattering (ca. 1000 years undulator life time)
- Ions below atomic mass of 100 do not get trapped (that takes care of the fast ion-instability)
- No noticeable reduction of the photon flux due to vacuum (found by comparing pressure and length to that of the gas absorber upstream of experimental hall)

Simulation mit/ohne int. Pumpe

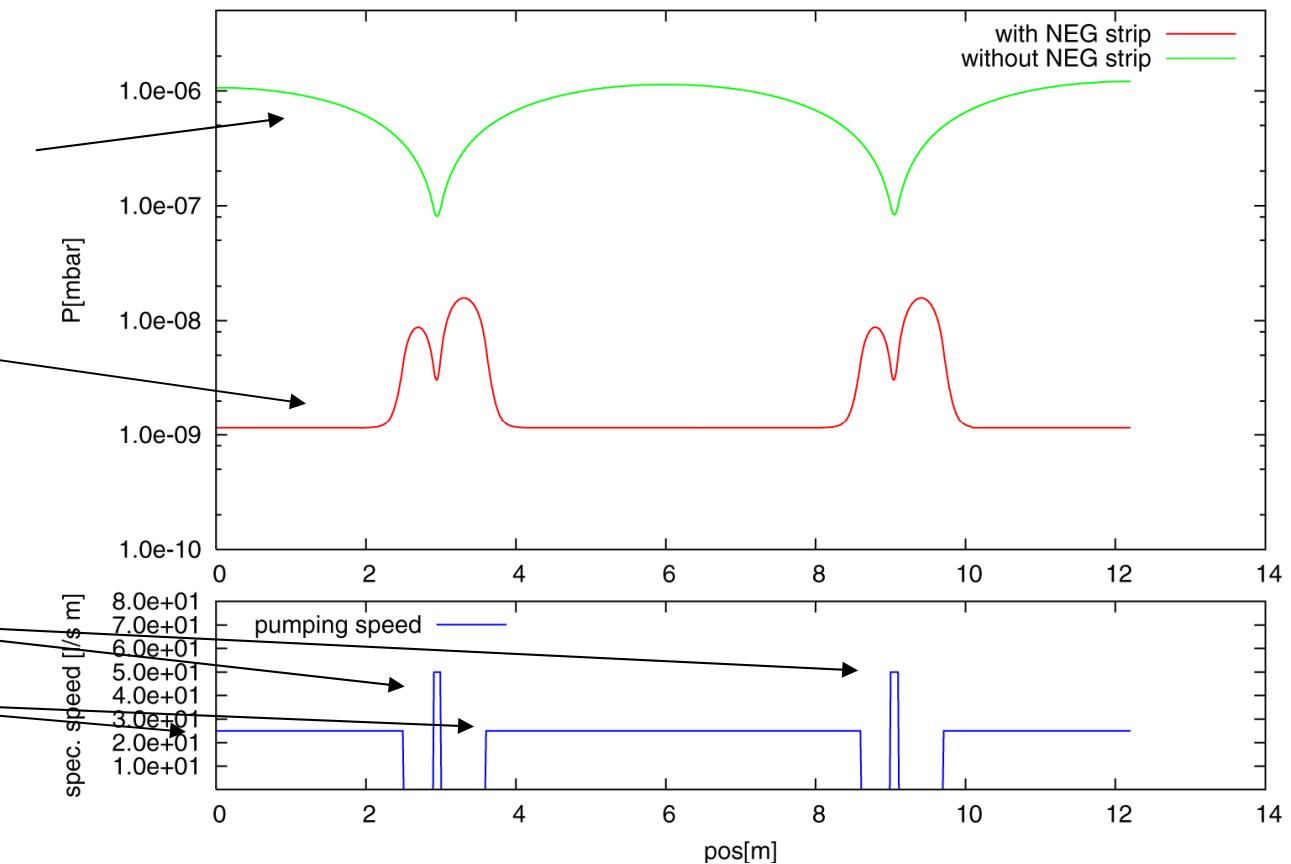
ohne Pumpe → stark
Leitwertebegrenzt

mit NEG Pumpe

Pumpgeschw. pro m

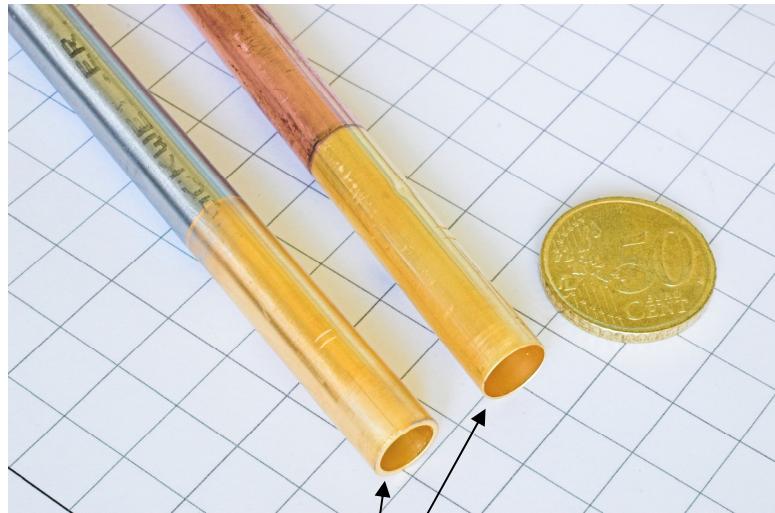
lokale Pumpe

NEG Streifen

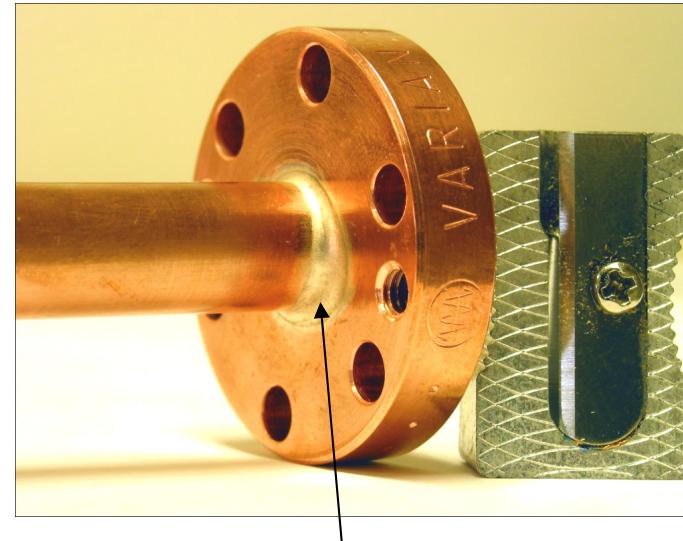


Weitere Alternativen

- dünnwandiges Cu oder Stahlrohr, vergoldet?
- Vorteil: Wandstärke bis 0.3mm möglich



galvanische
Goldbeschichtung



Lötverbindung