

SPAD on GaAsP for SLR

Calibration Ranging Results

**G. Kirchner, F. Koidl
I. Prochazka, K. Hamal**

Supported by Grant # 102/00/0820

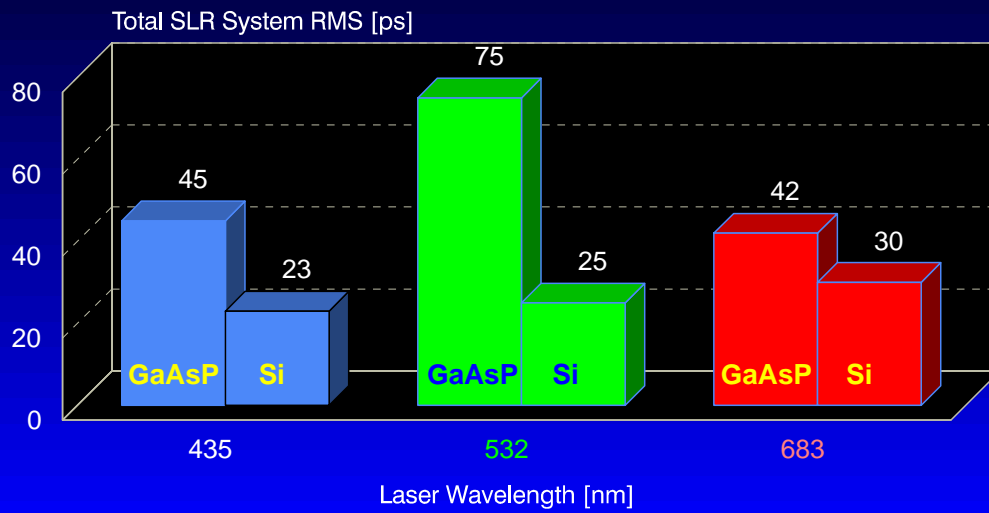
Matera, Nov. 2000

GaAsP-SPAD Tests: General Setup

- Short CAL Target Ranging
- Single Photon Level: < 10% Return Quote
- 1000 Photons Level: ND3 removed
- Total System RMS: 2.2 Sigma Iteration
- MultiColor: With Raman Tube Setup
- Timing: With 2-ps-Event Timer
- NO Time Walk Compensation for GaAsP

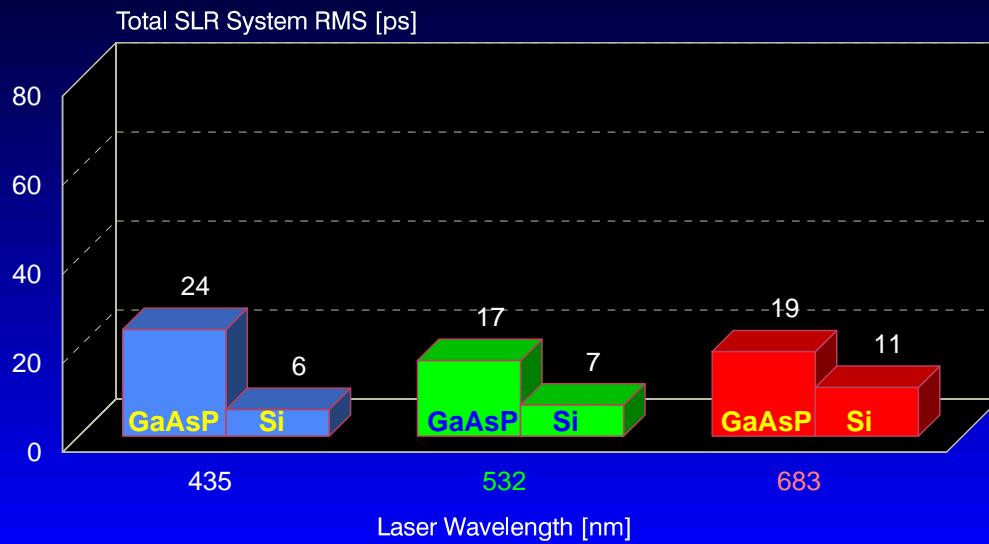
Graz SLR with GaAsP-SPAD

Total System RMS at Single Photon Level



Graz SLR with GaAsP - SPAD

Total System RMS at 1000 Photons Level



GaAsP - SPAD Tests: Sensitivity

Additional ND-Filters for Si-SPAD,
to get same Photon Numbers as for GaAsP
(Si-SPAD is MORE sensitive by this Factor):

435 nm

532 nm

683 nm

3 ND's

2.8 ND's

0.8 ND's