

Fig. 1. Layout of the six silicon detectors in the CNI polarimeter.

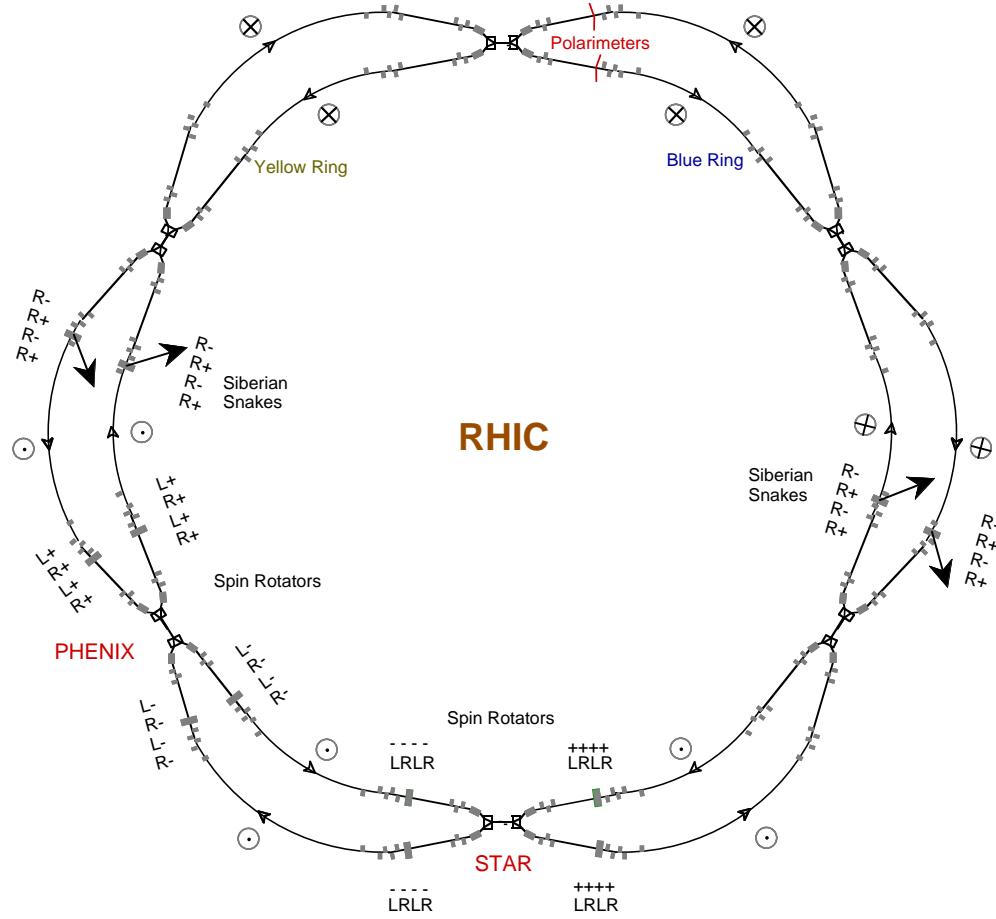


Fig. 2. Layout of RHIC polarization elements.

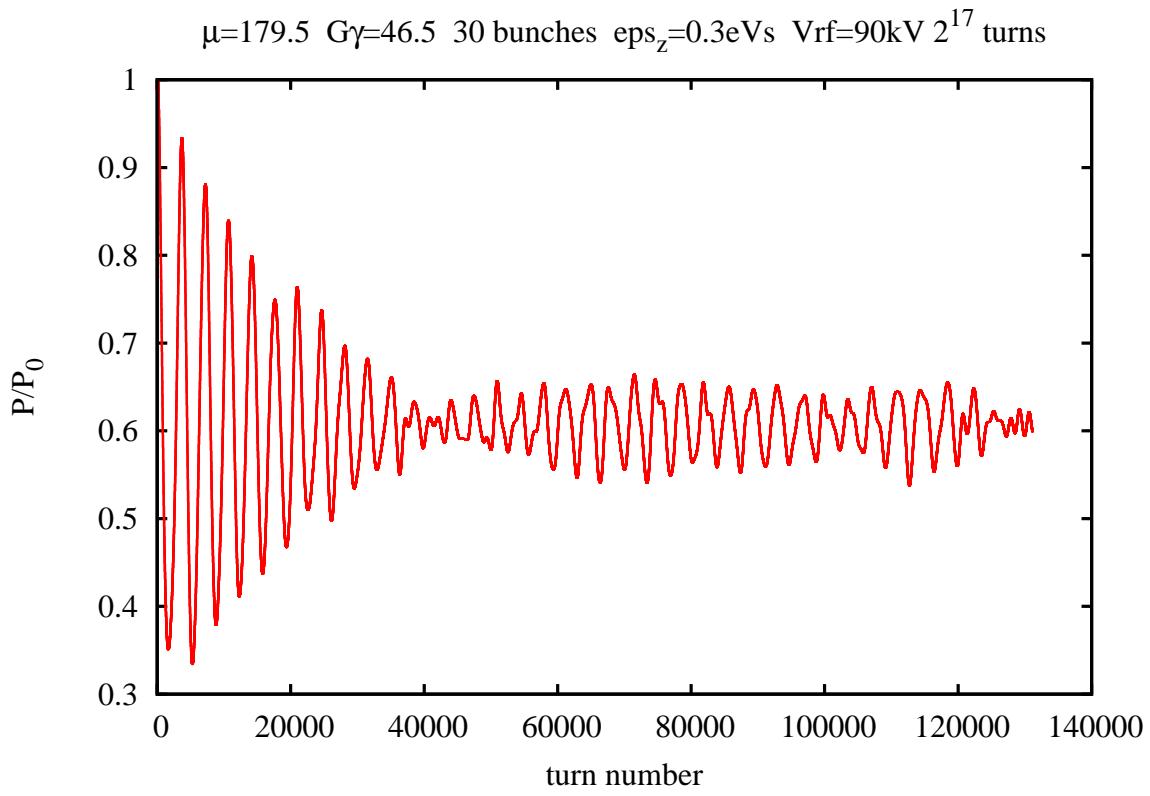


Fig. 3. Simulation of total polarization with $Q_{sy} = 0.00301$.

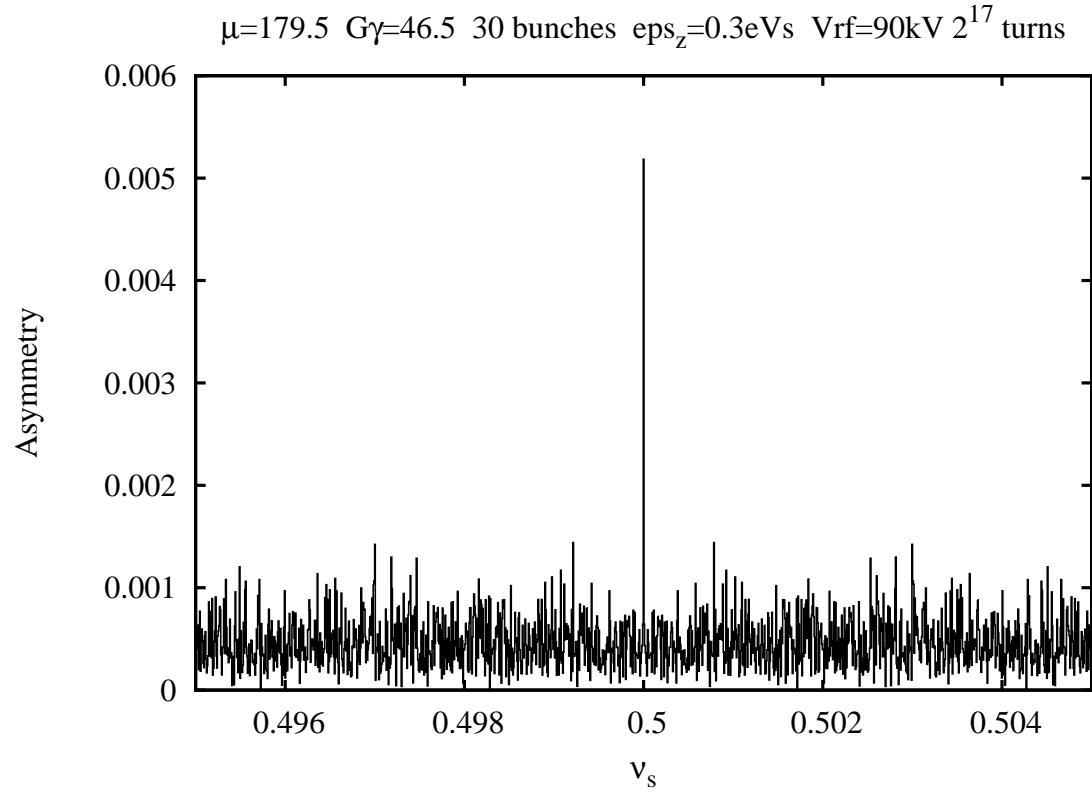


Fig. 4. FFT amplitude of the simulated polarimeter assymetry. $\nu_s = 0.50000$.

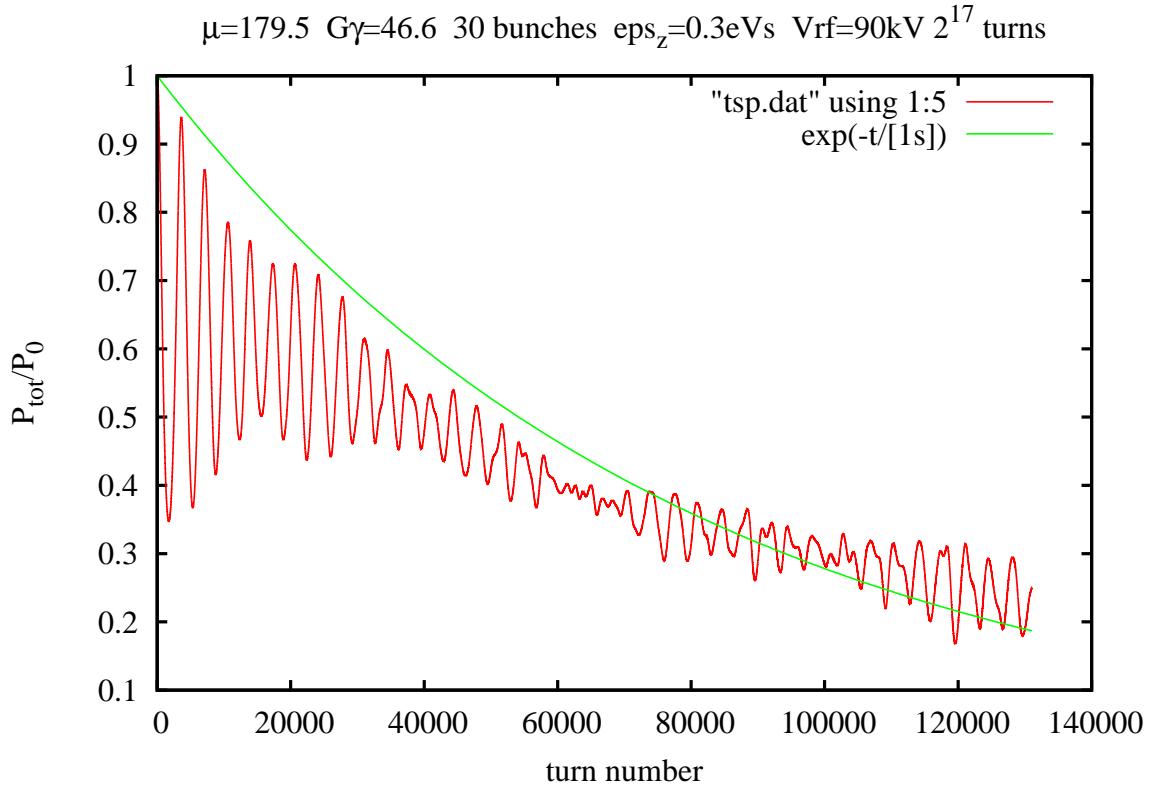


Fig. 5. Simulation of total polarization with a shift of energy. $Q_{sy} = 0.00301$. An exponential curve is shown for reference with a 1 s lifetime.

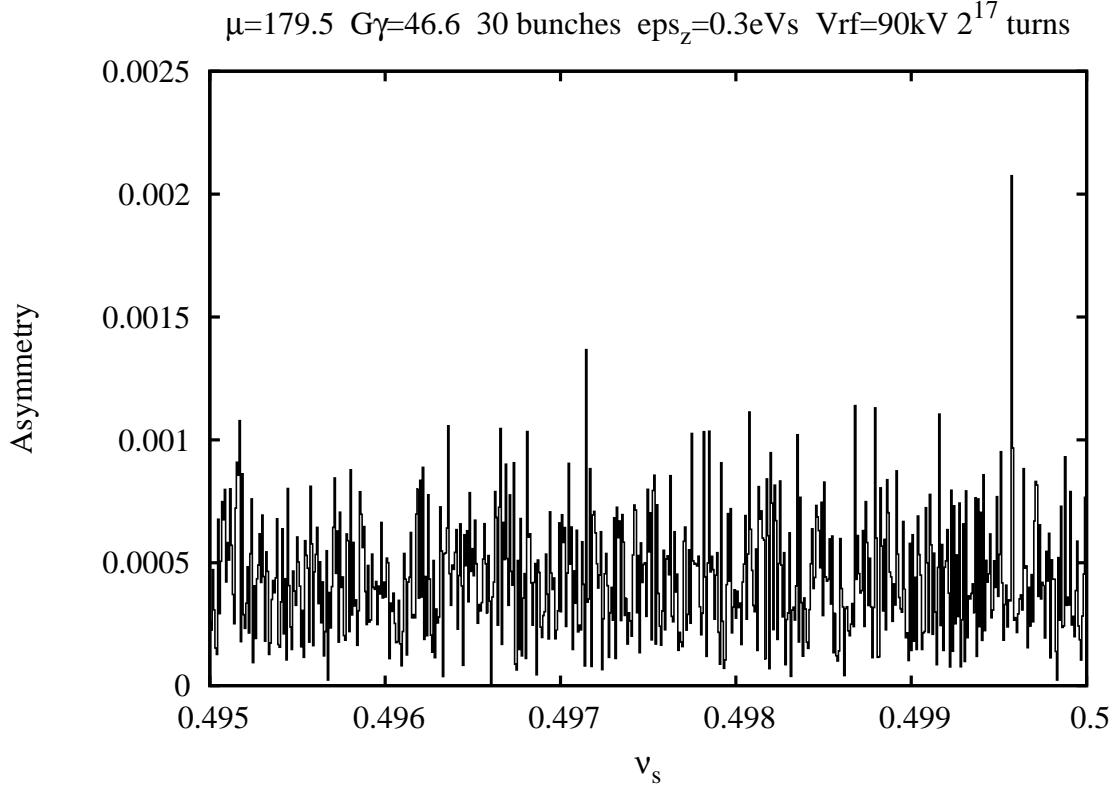


Fig. 6. FFT amplitude of the simulated polarimeter assymetry. $\nu_s = 0.49957$.

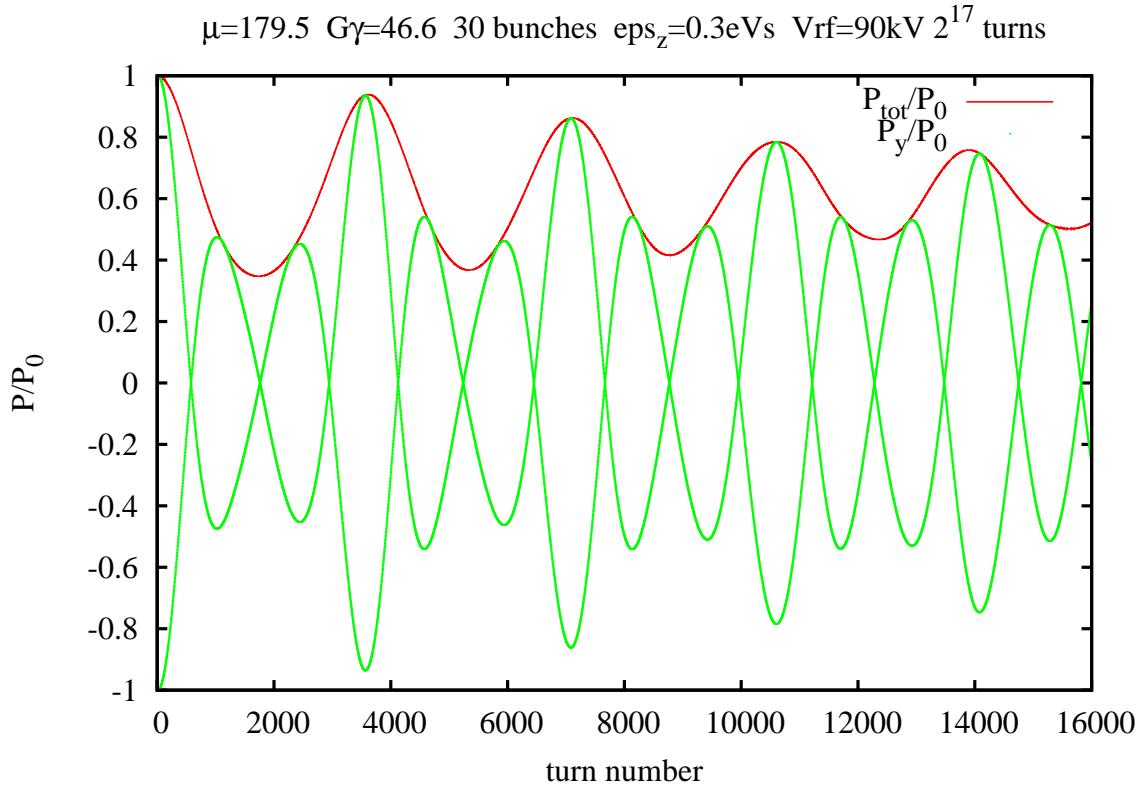


Fig. 7. Total and vertical projection of the \vec{P}/P_0 for the first 16000 turns.

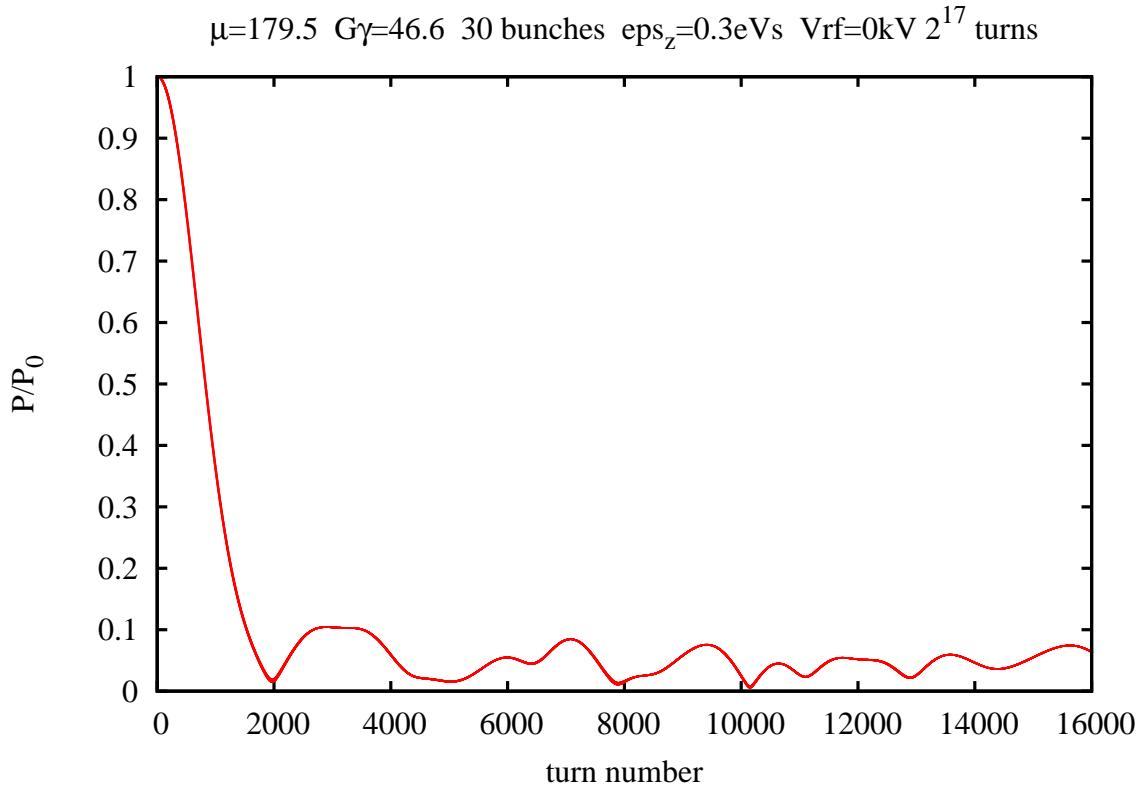


Fig. 8. Simulated spin decoherence with no synchrotron oscillations.

$\mu=179.5$ $G\gamma=46.6$ 300 particles $\epsilon_z=0.3\text{eVs}$ $V_{rf}=90\text{kV}$ 2^{17} turns

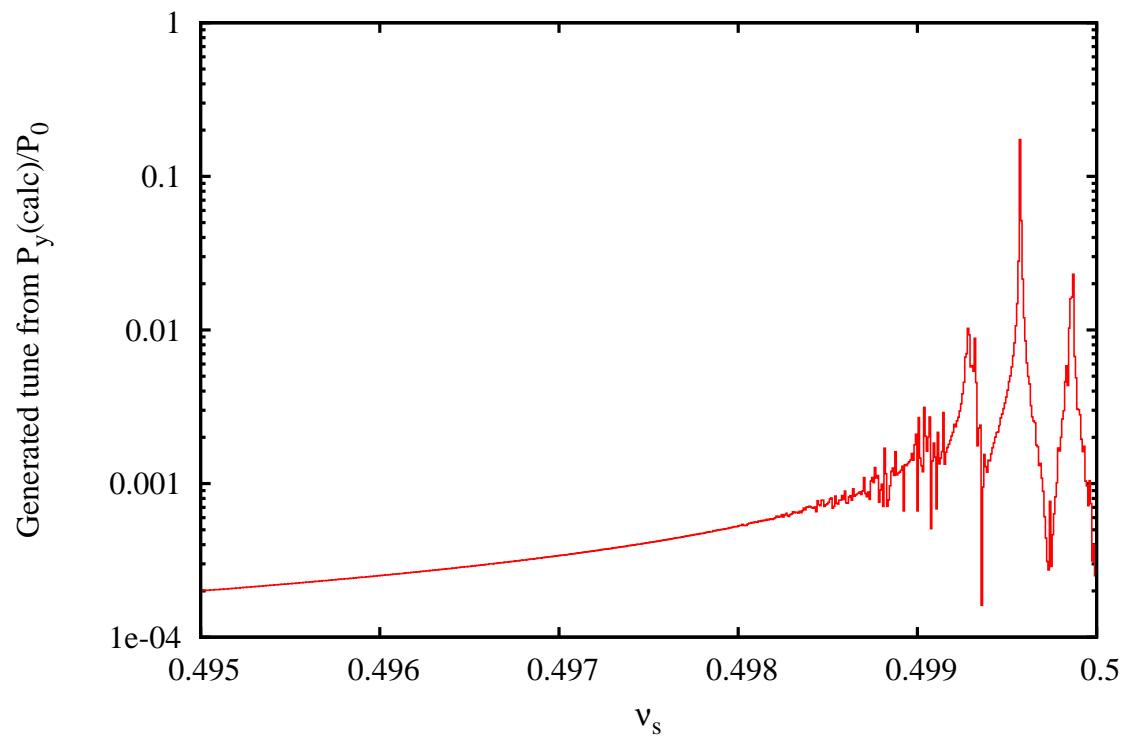


Fig. 9. Spin tune with synchrotron sidebands. $Q_{sy} = 0.00301$.