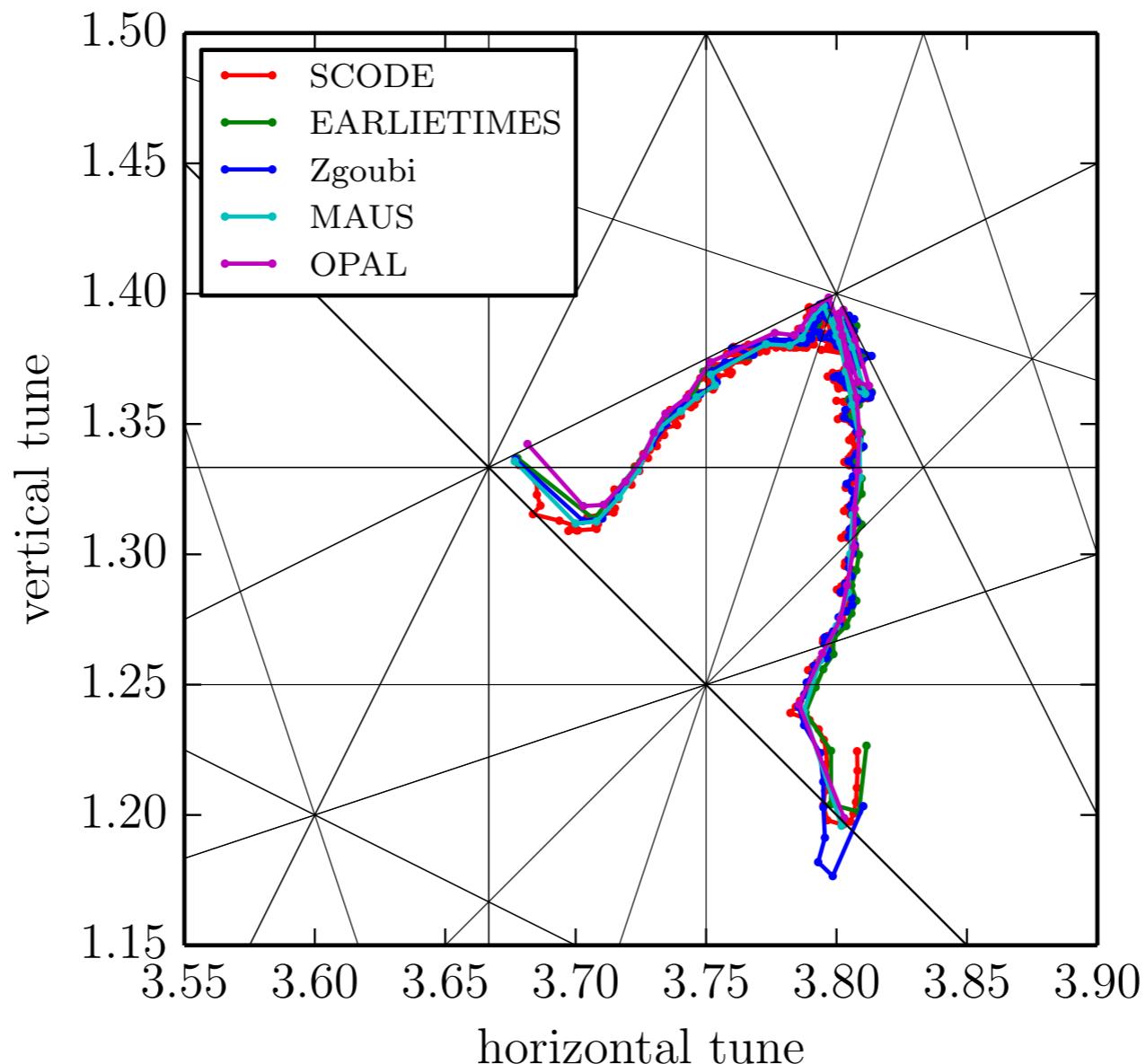


# KURRI Simulation Benchmarking

Work presented at IPAC'15

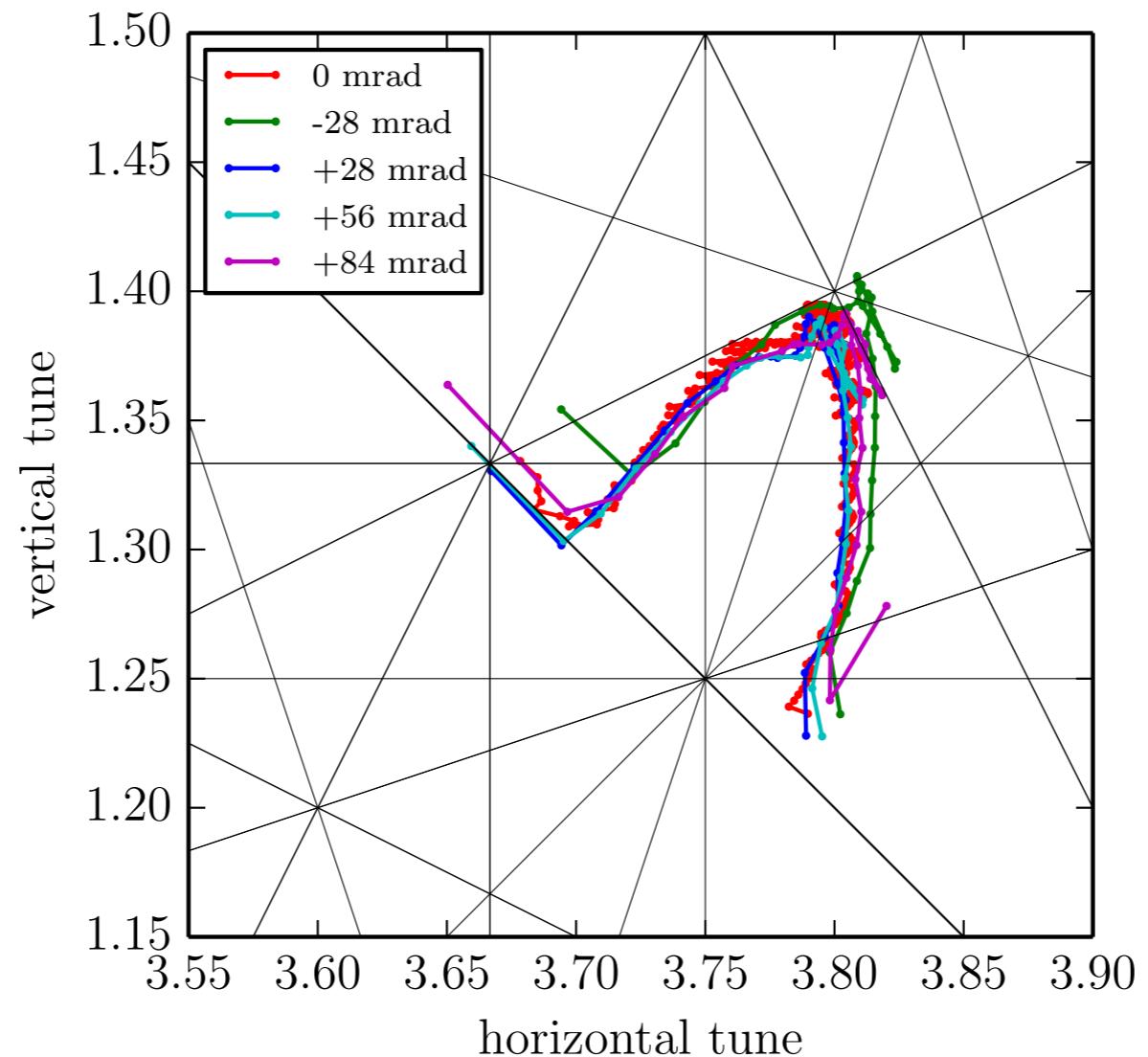
Suzie Sheehy  
14/5/2015

# Betatron tunes from 11 to 139 MeV

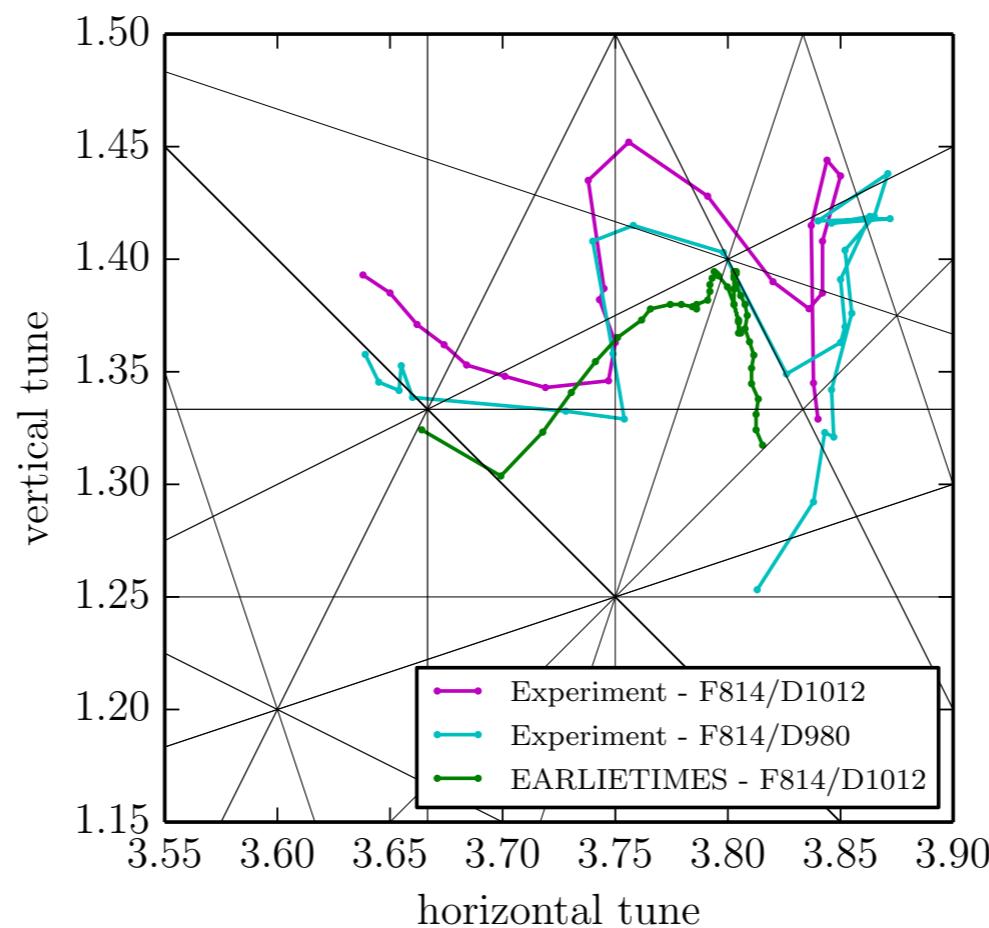


Thanks to: Shinji, Ishi-san, Malek, Chris R and Andreas A

# Tunes with single point COD source (thanks to Shinji)

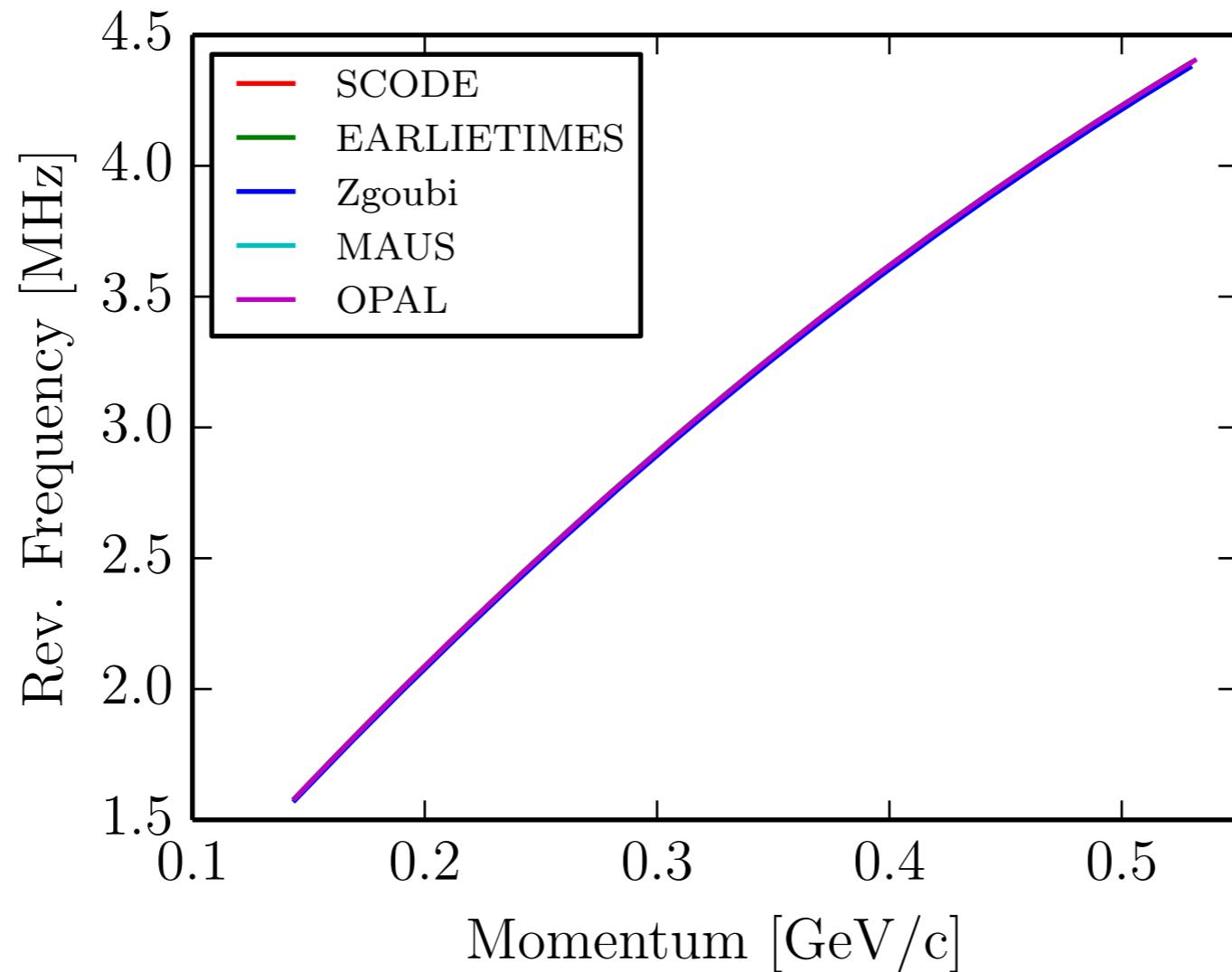


# Comparison to experimental result (Ishi-san)

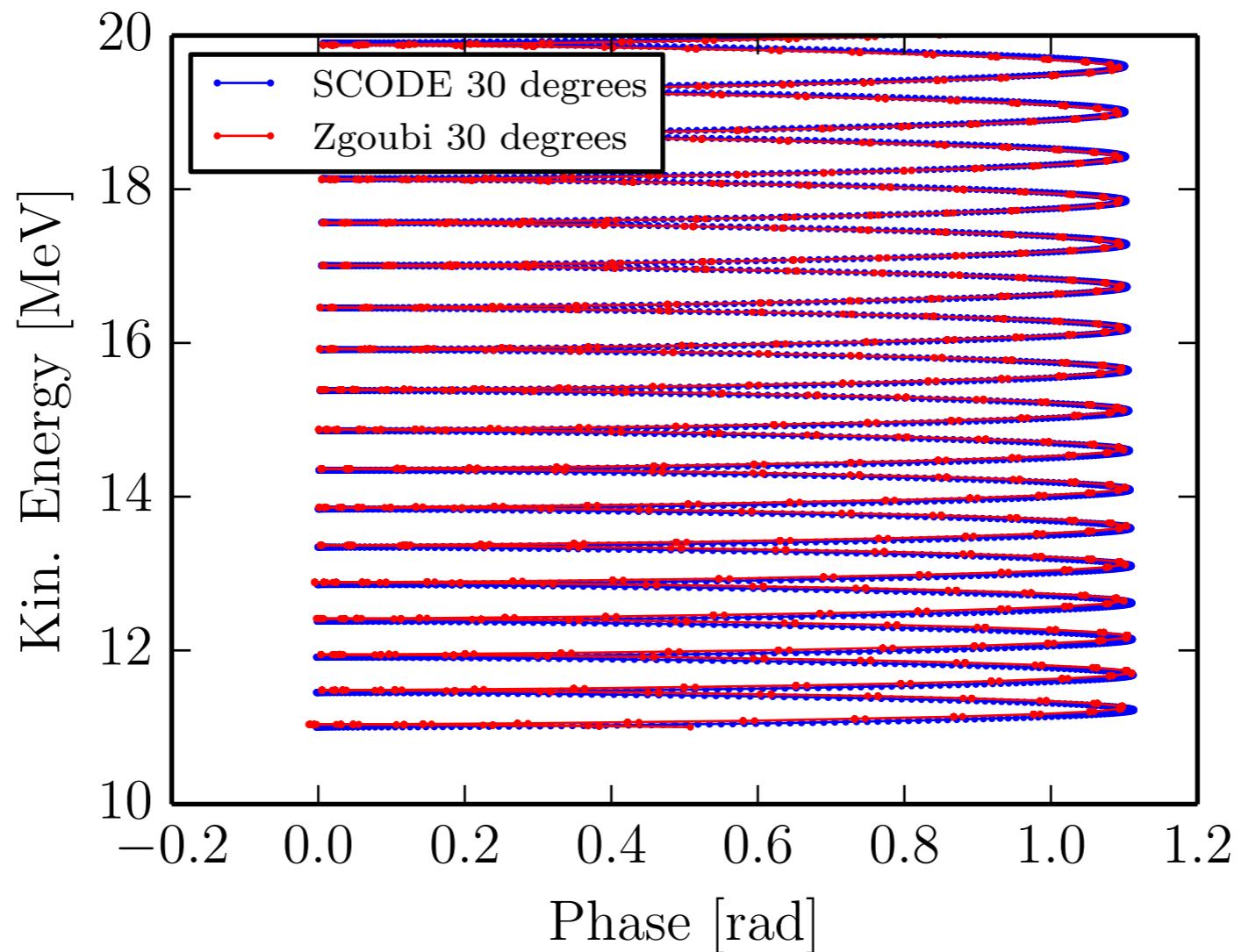


Measured betatron tune for two F/D ratios and simulation for comparison. Note the F814/D1012 data covers the range 11 to 100 MeV, while the F814/D980 data runs from 11 to 117 MeV.

# Comparison of revolution frequency



# Acceleration phase vs energy



Single particle with acceleration comparison of Zgoubi and SCODE. Thanks to Shinji & Malek.

# Next steps

- Need to upload these results/input files to simulation page & make sure correct files in github
- Other codes (OPAL in particular) to benchmark longitudinal studies.
- We should continue according to simulation plan (on hadron.kek server in 18th December meeting)
- Look forward to seeing matched distributions & high intensity studies.