

Report to TCTF

- Staff
- Facility
- Calibration
- Project

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Staff



- There are 8 staff in time and frequency group
 - Head of group: Zhang ai min
 - Time scale and Two way transfer: Gao yuan
 - GNSS: Liang kun
 - Frequency calibration: Zhang yue, Ma xiulan
 - Phase noise and NTP: Zhao kejia
 - System maintenance: Ning dayu, Wang weibo
- There are 15 staff in basic research group in other division focused on optical clock, optical fs-comb and fountain



Facilities

- Active H maser: 2 (MHM 2010)
- Cs clock: 4(5071A)
- TWSTFT station: 1(Timetech)
- P3 code GNSS receiver: 4
- Frequency measurement:
DMTD: 3, FD multiplier: 3
- Phase Noise: 10MHz-18GHz





- Some of frequency measurement facilities

Calibration in 2009

- H maser and Cs clock: 25
- Rb clock and High stable OSC: 80
- Counter: 120
- Spectrum Analyzer: 600
- Stop watch: 400
- Others: 100
- Remote calibration clients: 3





- Clocks for calibration



Project



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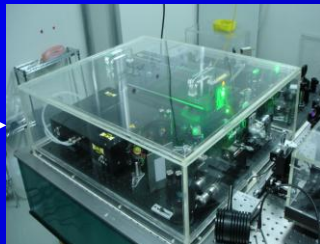
- New time scale TA(NIM):
 1. Clock ensemble will be expanding to 7 high quality Active H maser.
 2. Combined with 2 Cs fountains.
 3. DMTD used for measurement.
 4. Algorithm published on Metrologia in 2008.

Projects

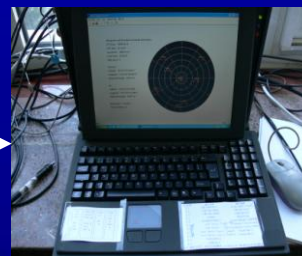
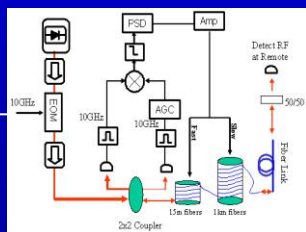
- Updating Phase noise measurement system
- Calibration of GPS receiver by simulator
- Developing new DMTD
- Linking two fountains by optical fiber
- Moving to new campus



Target



Hepingli
campus



UTC

Scientific/
navigation



Thank You

