Thanks to…

To your trusty planners, organizers, caretakers:

- **Carol Ann Austin, Joanne Savino**
- **Jennifer Jones, Jeanne Jackson-DeVoe, Kate Harkness**

To your tour guides:

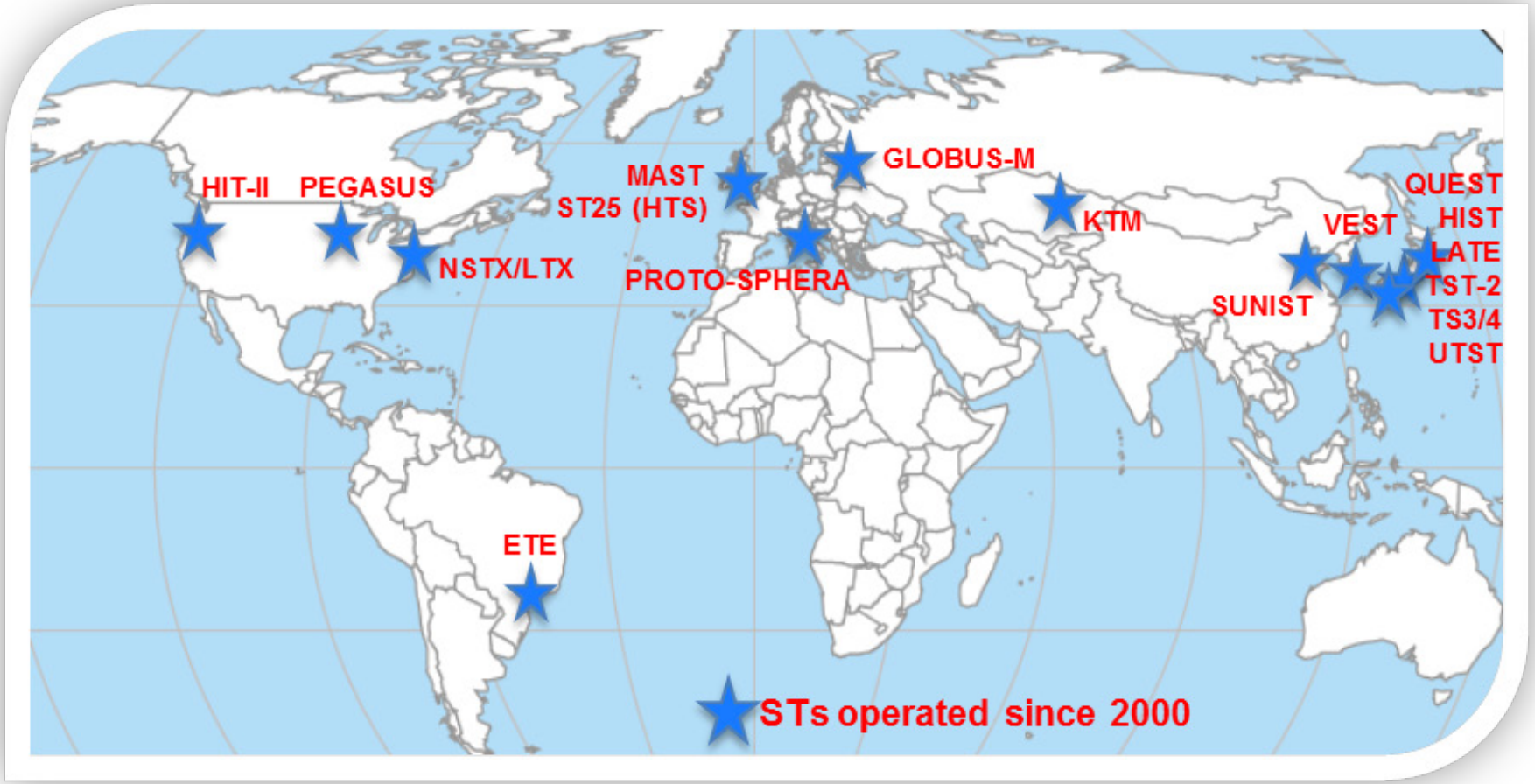
- **Stan Kaye, Mike Jaworski, Bob Kaita**

To our tour facility hosts:

- **Hantao Ji, Masaki Yamada, Sam Cohen, Dick Majeski**
- **David Gates, Brian Kraus**
- **Devon Battaglia, Stefan Gerhardt, Al Von Halle**

Thank you!

- For the great presentations and conversations
- For the strong international participation



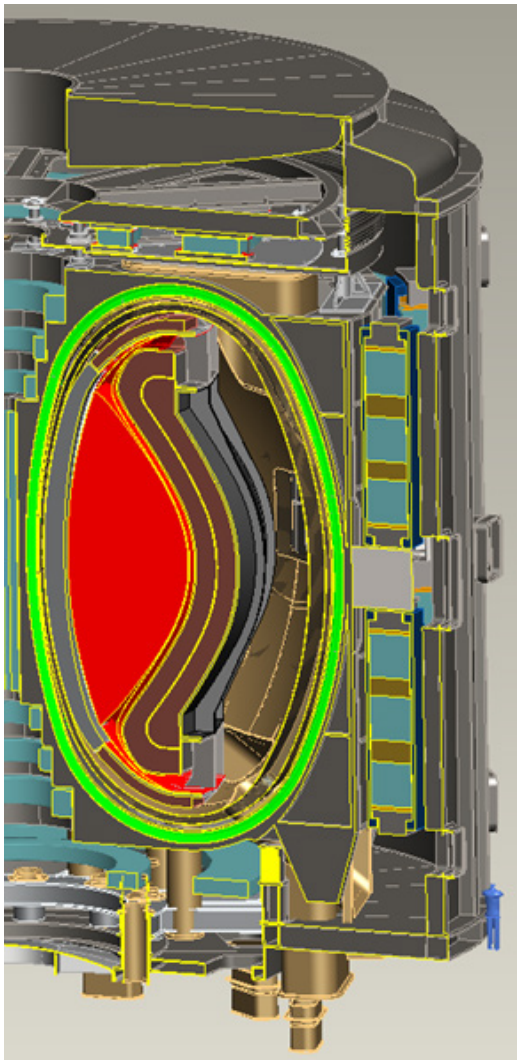
Created new International Energy Agency (IEA) ST Implementing Agreement website

http://iea-st.pppl.gov

M. Peng, S. Eckstrand, B. Lloyd, Y. Takase led efforts in mid 2000's to form IEA-ST IA

Recent/new collaboration on HTS ST FNSF concepts

R=3m, A=2, B_T = 4T, I_P = 12MA
P_{fusion}~ 560MW, Q_{eng}~1-1.5



- Collaboration topics recently initiated
  - MHD stability – global, pedestal (PPPL, CCFE)
  - AE stability, energetic particles (PPPL, CCFE)
  - Turbulence and transport simulations (York)
  - Self-consistent transport and stability (SNU)
  - Cross check shielding, TBR calculations (CCFE)
    - Assess solid breeder to complement US DCLL?
- Future work (near-term)
  - Layout of NNBI (PPPL)
    - Need for TRANSP runs, fusion and CD calculations
    - Port geometry/apertures, 3D TBR
  - NNBI sustainment modelling (PPPL)
  - Start-up, Ramp-up modelling (U. Wash, PPPL)
  - 3D shielding and TBR studies (UW-Madison)

Possible topic for reviving ST IA – Annex II:
"Co-operation on the Physics and Technology of Future Spherical Torus Devices"

Spherical Tori (ST) Implementing Agreement – Annex II

- Co-operation on the Physics and Technology of Future Spherical Torus Devices
- Purpose:
  - "The purpose of this Annex is to accelerate progress of research on the physics and technology of future ST devices through co-ordination of activities and exchange of technical information relating to the physics and technology challenges which are common to a range of future ST devices"

Spherical Tori (ST) Implementing Agreement – Annex II Activities

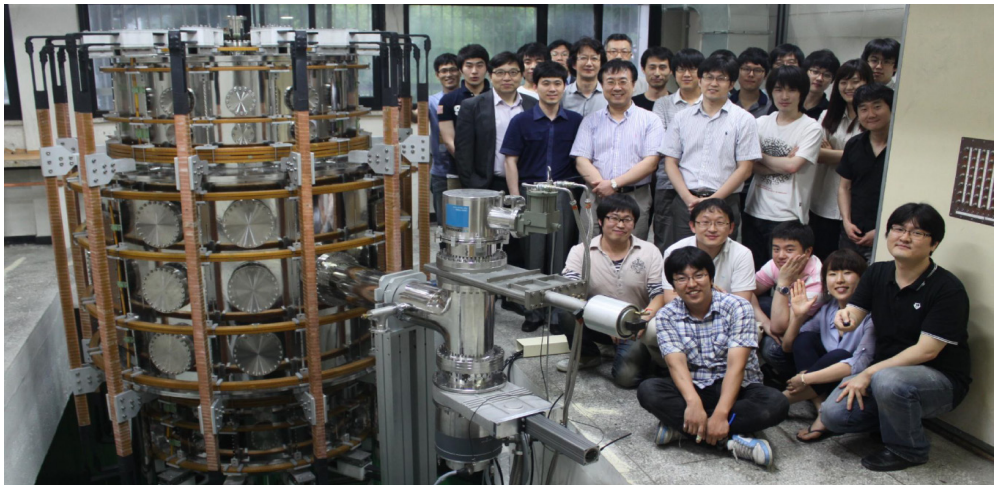
a. Experiments and modelling to establish the physics basis of future devices. Review and validation of physics assumptions.
b. Sharing of information on, and review of, the Mission and design point strategy of future devices.
c. Exchange of technical information and co-operation on addressing key engineering design issues e.g. load assembly and first wall, TF magnetic design, PF system design, central column (solenoid-free, retractable solenoid), heating & current drive systems etc.
d. Plasma exhaust and material interaction studies including advanced divertors and exhaust concepts e.g. super-X divertors, snow-flake divertors, liquid metal walls etc.
e. Additional topics, as necessary, which arise during the course of these studies.
f. Organization and participation in relevant expert meetings.

- Whether we (re-)initiate the IEA-ST IA Annex II or not…

Please let us know if/how you wish to participate in any of these next-step ST scoping studies

Possible venue for 19th International ST Workshop in 2017: Seoul National University (SNU)

- SNU Nuclear Engineering Dept. has new ST (VEST)
  - Studying non-solenoidal start-up, improved breakdown, …
- ST workshop not previously held in S. Korea
  - Seoul obviously has plenty of interesting attractions
- Prof. Y.S. Hwang agreeable if nobody else volunteers



- **Any other volunteers? (let us know ASAP!)**

Thank you!