

**Discussion-Session**  
**Session 2: Wednesday (11:15–13:00 Hrs)**

**Global Accelerator Network, Control Systems And Beam Diagnostics**

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Falling funds force all accelerator centers to look for new sources of financing and for the most efficient way of implementing new projects. This very often leads to collaborations between institutes scattered around the globe, a problem well known to big high energy physics experiments. The collaborations working on big detectors e.g. for LHC started thinking about detector acquisition and control systems which can be remotely used from their respective home institutes with minimal support on the spot.

This idea was taken up by A. Wagner from DESY for the TESLA machine, who proposed the Global Accelerator Network (GAN) enabling users from around the world to run an accelerator remotely.

Questions around this subject that immediately come to mind

- Is the GAN only relevant to big labs? Or is it reasonable e.g. for operators or engineers in charge to do certain manipulations from home?
- Are our instruments ready for the GAN?
- Does the fact of being GAN ready increase the cost of the instruments?
- What are the advantages and disadvantages?
- Do we want these features? Or do inconveniences prime over advantages?
- Do any of the labs already have experience with GAN or any system going into this direction?
- What does GAN mean for the relationship between controls and beam diagnostics (a sometimes difficult chapter)?
- Can measurement systems be put onto the WEB and if yes, which ones?
- Where are the limitations?
- Can the scope of GAN be expanded to remote diagnostics and active maintenance of equipment, i.e. collaborating partners maintain their product in service after commissioning?
- What about common machine experiments with people sitting in different control rooms?
- What communication systems have to be put in place for this?
- Are there security issues and how do we deal with them?