Commissariat à l'énergie atomique
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Institut de recherche sur les lois fondamentales de l'Univers

# Minutes of the biweekly phone meeting

À : GET Collaboration

Copie :

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Pour info :

| **Objet : minutes of the phone meeting** | | |
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| Date :27 Janvier 2009 | V/Réf : 02 | N/Réf : |

*Partner :* Bickley Abigael, Usher Nathan, Jean-Louis Pedroza, Jerome Pibernat, Gilles Wittwer, Pascal Baron, Laurent Nalpas, Ricardo Raabe, Frédéric Druillole.

During the meeting, we discussed several issues:

1. ADC/AGET interface
2. AsAd/CoBo interconnection
3. CoBo and worldwide connection
4. MSU pair funding
5. clock distribution

AsAd/AGET

Pascal has simulated the common mode regulation between AGET and the new ADC. So the AGET circuit could stand the 1.5V common mode of the ADC.
Jerome proposes a new DAC for the pulse generator (AD9707) because of a sleep mode. Otherwise, it has the same even better performances than the FEC one.
A SAMTEC connector proposed by CENBG seems good to handle communication between AsAd and CoBo. MSU must test one in the same time than Bordeaux.

CoBo:

Drivers and memory are not chosen yet. Performance test must be done soon between the ADC and the FPGA board. A discussion occurred about the link between CoBo and the external world. Frederic Druillole showed that a detector event (all the channel ) is about 7.5 Mbit to store in CoBo. If we use Ethernet (TEMAC) link, we could handle only 50 evt/s and even with a light communication protocole, we will reach few hundred of event/s instead of 1 kcounts/s. So we need absolutely to reduce the data size. So depending of the policy, why not using Ethernet link ? The question is open.
But if we use Ethernet link, we could give up the development of the Inbo board. We will discuss that in February.

MSU pair funding:

MSU group write a proposal to get money to send Student or engineer in a foreign country during 4 months for 4 years. Ricardo Raabe proposes GANIL as a place to host the person. As the first step of the GET project is to test AGET and AsAd, Frederic Druillole proposes also that Saclay could be a hosting place for end of 2009, beginning 2010. CENBG has to discuss internally if they could host the person too.

Mutant:

In 2009, Mutant and CoBo must define the interconnection link. The build of Mutant will started in 2010.

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Clock distribution:

CENBG proposes to remains with LVDS transmission for the clock. Gilles Wittwer explains that the better choice could be to tranmit in LVPECL witch give better jitter. Solution must be studied. Gilles must give some information about LVPECL.

NARVAL:

Why using NARVAL in the embedded software and firmware ? The question would be answer at the Saclay meeting.