

Subject: Questions of TF6 Calorimetry: reply from LAPP, France

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Dear all,

Please see below the replies to the Questions of TF6 Calorimetry which we had compiled at LAPP.

Don't hesitate to contact us if you have any further questions.

Best wishes,

Tanya

What is the capability of constructing and testing prototypes in your country? If limited, do you have access to networks that enable to integrate into prototype projects?

France

has already proved to be able to prototype and built large calorimeter detectors (e.g. the ATLAS LAr EM calorimeter modules), so the French capability is or could ideally be sufficient, if there is sufficient interest in the community and political/financial support by the main funding agencies (CNRS/IN2P3, CEA).

For the construction of large(r) devices: will/can construction be realised "in house" or is the tendency rather towards subcontracting?

We

should be able to build large devices in house (e.g. insuring the mechanical infrastructure needed for module assembly), while some the main components requiring specific tooling machines (e.g. kapton electrodes with serigrafic deposit, to take the example of a generic LAr calorimeter with technology similar to the current ATLAS calorimeter) will need to be manufactured via subcontracting

Is work on instrumentation recognised for careers in your country?

To

obtain permanent physicist researcher positions in France committing to 100% instrumentation work is not enough, but the instrumentation work is strongly encouraged at later stages of the carrier. A balance should be struck for Early Career Scientist (even already with permanent positions) since a too strong commitment to instrumental work might cripple their career advancement. In France there are also "research-engineer" permanent positions which are currently becoming more available, and might represent a suitable career path for physicists wishing to orient their careers exclusively toward instrumental work.