

News from I3HP & NoRHDia

2nd Collaboration Committee Meeting
Frascati, 10-11 June, 2005

I. Reports: Scientific Highlights

(Networks, JRA's, Transnational Access Activities)

Presented by the spokespersons

II. Status of the Hadron Physics Project

Presented by Carlo Guaraldo

III. Report: Dissemination efforts

Presented by Yara Bravo

Novel Radiation Hard CVD Diamond Detectors for Hadron Physics

(JRA11)

- ★ HI Spectroscopy Detectors
- ★ MIP Timing Detectors
- ★ Improved Growth Processes

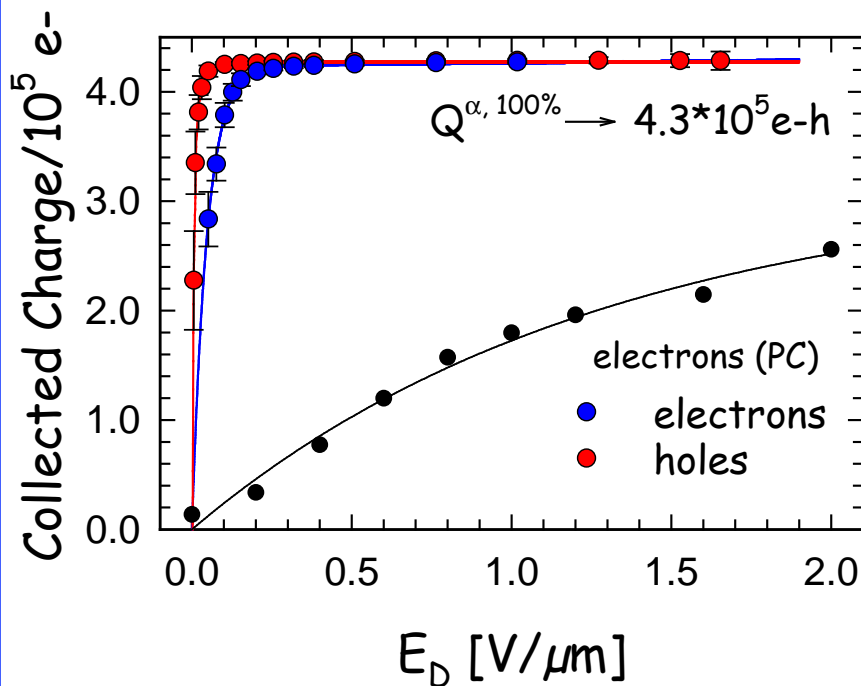
NoRHDia

Scientific Highlights I

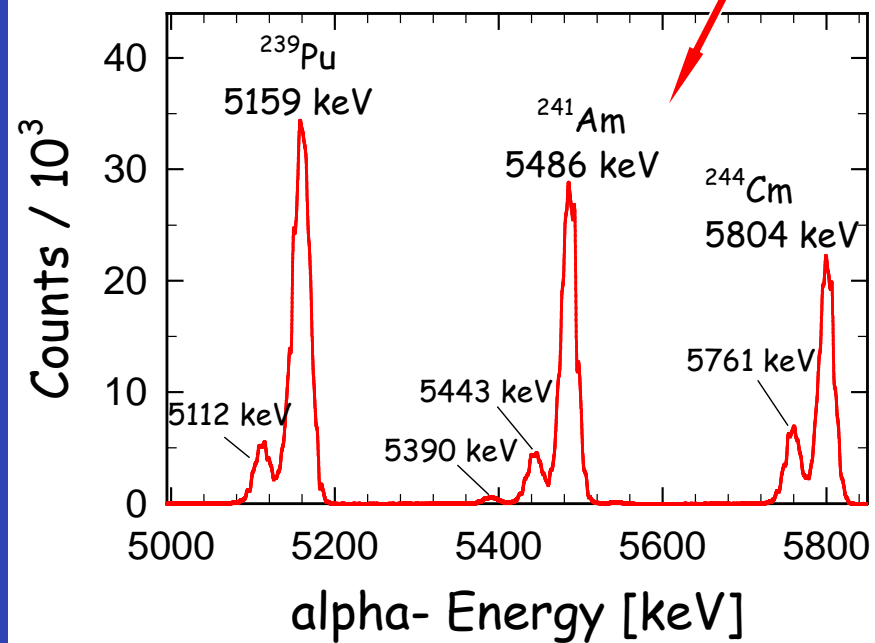
$$\Delta E_{\alpha}^{\text{diam}} = 17 \text{ keV}$$

$$\Delta E_{\alpha}^{\text{Si}} = 14 \text{ keV}$$

● CCE $\approx 100\%$



● $\Delta E/E = 0.003$

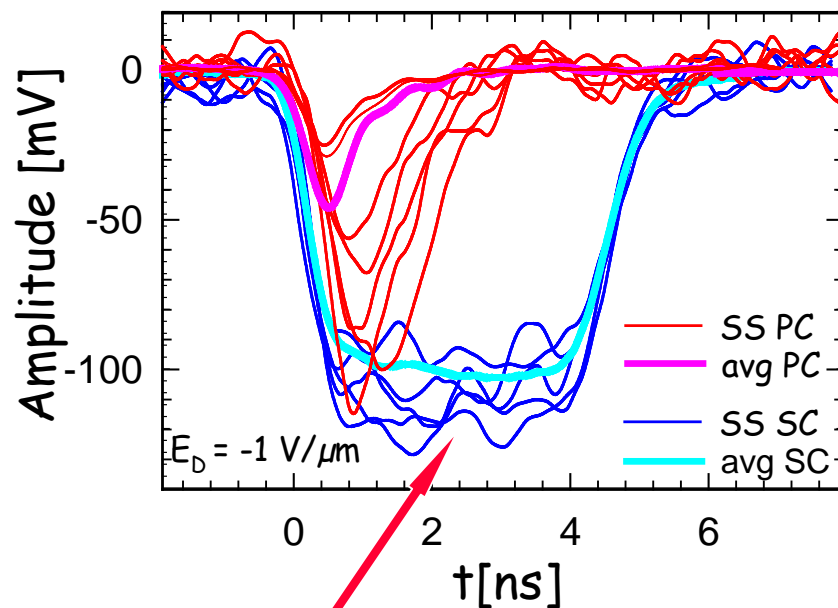


SC-DD:

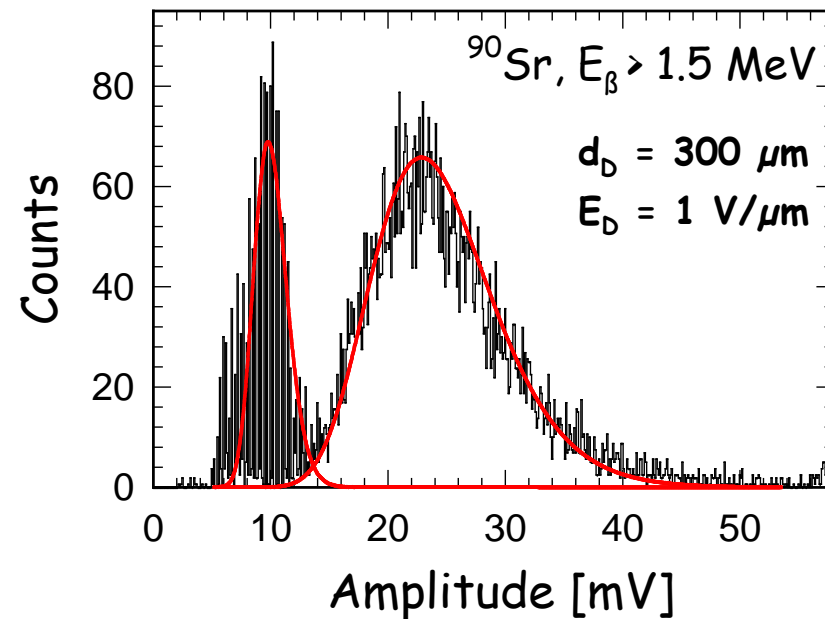
$d_D = 300 \mu m$, $A = 3 \times 3 \text{ mm}^2$

Scientific Highlights II

- Original diamond pulses
 $t_{\text{rise}} < 200 \text{ ps}$
 HI-DBA, 1 MHz - 2.3 GHz



- MiP efficiency $\approx 98\%$
 DCSFA, $t_{\text{rise}} = 1.5 \text{ ns}$



Complete charge collection and fast drift: $v_{\text{drift}} \approx 100 \mu\text{m/ns}$
 $Q_C = 1/R^* \int U(t) dt$

Single-Crystal CVD-Diamond

- Standard material:
 - up to $5 \times 5 \text{ mm}^2$ and 300 - 500 μm thickness
 - commercially available now

- Enlargement of area
 - Lapping below 300 μm
 - Development of prices
- Contract in preparation

★ First good quality samples grown at Saclay

II. Status of the *Hadron Physics* Project

"Study of Strongly Interacting Matter"

Carlo Guaraldo

- ★ 1. Time scale of the Project
- 2. Amendments to the contract approved by the Commission
- 3. Management of the Project
- ★ 4. Complementary management report 01/01/-30/04/2005
- ★ 5. Amendments to the contract to be requested to the Commission
- ★ 6. *HadronPhysics* Project and ECT*
- 7. Mid-term review
- ★ 8. Organization of a *HadronPhysics* general meeting
- ★ 9. A.O.B.

Time scale of the *HadronPhysics* Project

- 14 Feb. 2005 ★ Delivery to Bruxelles of the first Annual Report
- 14 Feb.-22. April Exchange / comments / corrections with officers
- 21. April 2005 Approval of first amendments to the contract
- .
- .
- 13. June 2005 ★ Delivery of complementary Management Report
- .
- .
- September 2005 ★★ Expected second pre-financing

What's about the Complementary Periodic Management Report

01/01/-30/04/2005

Article 8.2(d) *modified*

"Where less than 70% of a pre-financing has been used at the end of a reporting period, and notwithstanding the approval by the *Commission* of the related reports, subsequent intermediate pre-financing may be paid only on the basis of a complementary periodic management report referred to in Article II.7.2. B that shall be submitted to the Commission once the above mentioned spending rate has been achieved."

From the first annual report

- Community's pre-financing sent to the coordinator, corresponding to the first reporting period and the first six months of the subsequent reporting period
 \Rightarrow **6.400.000,00 EUR** (i.e.: 80% of P1 request)

- Threshold to receive the second pre-financing (modified)
70% (6.400.000,00 EUR) = **4.480.000,00 EUR**

- Requested EC contribution for the first reporting period:
3.519.129,38 EUR \Rightarrow - **960.870,62 EUR**

-as the amount of costs declared in this complementary period (added to what has already been declared for P1) will determine the amount of the next pre-financing, we leave to the consortium the possibility to provide as many form C as they wish over the threshold of 70%.

- „ ... Higher will be the costs declared, ..., higher will be the amount of the second pre-financing.“



Total EC requested contribution (January-April 2005)

1.781.701,71 EUR

Additional Amendments to be requested to the contract

1. Notwithstanding the provisions of Articles ...

- Special clause 13:
Contractors with flat rate overheads of < 20% of the total eligible direct cost.
- Special clause 39:
Exemption of certain contractors from the requirement to provide periodic audit certificates.

2. NoRHDia Amendments

.... are withstanding
the provisions of Articles.

1. Contractor No 3, LUC Belgium, changes with contractor No 7, LIST/CEA/Saclay

➤ LUC is not a contractor anymore but an „other involved institution“ in NoRHDia

2. Contractor No 8, CNRS/IN2P3, becomes a new „other involved institution“ in NoRHDia (ESRF)

3. A scientific cooperation with AIST Tsukuba, Japan, with Christoph Nebel as an external expert.

I3HP and ECT* (Trento)

ECT* (European Centre for Theoretical Studies in Nuclear Physics and Related Areas):



Plays unique role in the area of hadron physics and the physics of matter under extreme conditions, through workshops, training programmes, research projects and as well by promoting exchange of scientists and co-operation between theoreticians and experimentalists.

Cooperation between *HadronPhysics* and ECT* Trento

- Joint HadronPhysics-ECT* Workshops

- ECT* can become the elected site to host the General HadronPhysics meeting

- Long-term Periods

- ECT* can host in order to attract external researchers. Specific possibilities can be open to scientists supported within the frame of *HadronPhysics*.
- Other important aspect: Research training periods for advanced doctoral students supported by the EC funds of *HadronPhysics*.

Organization of a
HadronPhysics
general meeting in November
2005.

A.O.B.: Time Sheets

Any personnel cost, to be eligible for EC, must be certified by a time sheet, independently on the cost model (AC or FC) and independently on the type of activity (Network or JRA).

- For an AC contractor, time sheets must be provided for any person receiving an EC contract.
- For an FC contractor, time sheets must be justify any personnel cost to become eligible.

Who is responsible for time sheets ?

The activity coordinator

Who is receiving two time sheets for each person?


The auditor

- One declaring the work done (signed by the person)
- One certifying that the work was done (signed b. activity coordinator).

Towards FP7

<http://www.cordis.lu/fp7>

Roadmap - Timeline 2006:

- ☐ An inter-institutional debate for consensus on the establishment of a European Security Research Programme.
- ☐ Final administrative stages in the co-decision process for adoption in FP7.
-  End of FP6.
-  FP7 is to be launched at the end of 2006.

Towards FP7

<http://www.cordis.lu/fp7>

Roadmap - Timeline 2007

- ❑ Calls for proposals under 2007.
- ❑ First projects to be launched.
- ❑

III. Dissemination Efforts

Yara Bravo

1. Restyling the HP Web Site:
www.infn.it/eu/i3hp/wel.html

2. Implementing the Dissemination Board:
All members of the collaboration committee

Elected chairman:

Joerg Aichelin, CNRS/IN2P3, SUBATECH, Nantes

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