

# **BUG – Bureau des Utilisateur de GANIL**

## **GANIL Users Committee**

### **ROLE**

**communication between GANIL users and GANIL directors,  
technical staff, physicists, ...**

- on existing facilities and ongoing experiment
  - ◇ improve the conditions for experimenters
  - ◇ inform users on ongoing developments  
(radioprotection, experimental areas,  
acquisition, beams, ...)
- exchange ideas for developments of new beams  
(stable, SPIRAL, ..)
- give input on developments for the future (SPIRAL2)

**The GANIL direction would like to receive more input from –  
and improve the communication with – the USERS**

# BUG – Bureau des Utilisateur de GANIL

## GANIL Users Committee

### Present members:

- Chair: Gerda Neyens (Leuven, Belgium)
- Secretary: Stephane Grevy (GANIL)
- Others:
  - Patricia Roussel-Chomaz (GANIL)
  - Christophe Theisen (CEA-Saclay)
  - Roy Lemmon (Daresbury, UK)
  - Jean-Michel Daugas (Bruyeres-le-Chatel)
  - Jerome Giovinazzo (CENBG)
  - Nadine Redon (Lyon)
  - Amine Cassimi (CYRIL)

◇ On every meeting, we invite additionally:  
a member from direction, members from technical staff,  
web responsible, ...

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## GANIL Users Committee

### **History:**

- first meeting in October 2003
- meetings twice per year since then:  
March 2004, October 2004,  
April 2005, December 2005  
May 2006

### **ACTIONS:**

- re-establish the 'End-of-Experiment' forms
  - ◇ to monitor recurrent problems, questions from users
- discuss improvements of GANIL website
- discuss how to inform community/users (format, audience, )

# BUG – Bureau des Utilisateur de GANIL

## GANIL Users Committee

### Changes realized on request of **USERS**:

#### QUESTIONS from **USERS**

#### RESULT

Oct. 2003: improve internet access for external users

March '04: ML suggests to install wireless access in guest house and rooms

April '05: wireless installed at LISE/SPEG, in central hall of guest house, in 242, installation in rooms under discussion

May '06: wireless installed in rooms

Oct. 2003: improve quality of the kitchens and sanitary near exp. areas

April '05: kitchens and sanitary at SPEG and LISE are renewed  
water fountains are available there

Oct. 2003: provide water fountains in exp. areas

Oct. 2003: improve cleaning of guest house (at least daily, also in weekends)

March 2004: situation is improved, 'profound cleaning' each winter/summer shutdown

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### Changes realized on request of USERS:

#### QUESTIONS from USERS

#### RESULT

Oct. 2003: install a target laboratory ?

Oct. 2004: the VIVITRON target material will be moved to GANIL, a target room is in preparation in acq. North

May '06: reorganisation of acq. North in winter shutdown 2006-2007, to include target room + LARIAT room

March 2004: a BUG-correspondent is appointed to each experiment.

The spokespersons are requested to fill an 'end-of-experiment' questionnaire, which is discussed at the first BUG meeting following their exp.

- more tampon beam time after SPIRAL beams requested and obtained.
- electronics pool at GANIL  $\diamond$  to be discussed.
- improve guest house for allergic and handicapt persons  $\diamond$  in progress  
(3 rooms are renewed without carpets, make 1 room out of two)

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## GANIL Users Committee

**Changes realized on request of USERS:**

### **QUESTIONS from USERS**

### **RESULT**

March 2004: Status of SPIRAL beams given, input asked to improve SPIRAL operation.

Sept 2004: ASPI working group initiated. BUG sent a request to users to put letters of intend for new SPIRAL beam developments, to provide comments on SPIRAL operation.

Oct. 2004: comments / suggestions received and discussed.

April 2005: recent developments + list of priorities set by direction are presented to BUG

Dec. 2005: preliminary list of priorities based on users request and discussion with technical team is presented to BUG, and sent to direction spring. 2006.

# BUG – Bureau des Utilisateur de GANIL

## GANIL Users Committee

**Changes realized on request of USERS:**

**QUESTIONS from USERS**

**RESULT**

May 2006: a **'users feedback meeting'** is organized  
**every Wednesday between 10.00 – 10.30**  
in room 160 near PCP (control room)

◇ experimenters preparing or running an experiment  
at that moment should attend this meeting to  
provide info, feedback, ...

AIM: improve the quality of user support !

# BUG – Bureau des Utilisateur de GANIL

## GANIL Users Committee

### Changes realized on request of **USERS**:

#### **QUESTIONS from USERS**

#### **RESULT**

Oct. 2004: A lack of electronics modules is mentioned by several users.

April 2005: BUG should remind the users that they have to bring their own electronics. At GANIL electronics is available only for GANIL physicists.

May 2006: find out which kind of support the users want, mainly modules to help them in case of failure of their own ?  
How to organize this ?

Dec. 2005: Could GANIL provide a few bicycles for users ?

May 2006: will be available soon (info at the reception desk)

Dec. 2005: A lack of calibration sources is mentioned by several users

May 2006: New sources will be bought this year and a few others next year.

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## GANIL Users Committee

### Changes realized on request of DIRECTION

#### QUESTIONS from direction

#### RESULT

Sept '04: the BUG sent e-mail to request for interest in the **use of ORION detector**

April '05: very limited users response send to direction.

May '06: detector will be dismantled (June/Dec 2006)

May '06: perform an inquiry with users about the interest in **using the NAUTILUS chamber**

May '06: get input on **'what users would like to find on the GANIL website'**

◇ present layout is not very clear

◇ which information is missing ?

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## GANIL Users Committee

**QUESTIONS from technical staff**

**RESULT**

May '06: are users still interested in the “**package suppressor**” for producing pulsed beams ?

- ◇ this system is presently not available. Major investment is needed.
- ◇ IS THERE NEED ? WHAT time properties are needed ?

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## GANIL Users Committee

### Information from the BUG $\diamond$ USERS

- the minutes from our meetings are available on the GANIL website

**WHERE: on main page under USERS GUIDE**

**link to “Bureau Utilisateurs GANIL”**

- we also provide there status reports on the upgrades/changes related to

- beams
- experimental areas
- acquisition
- radioprotection
- ...

**BUG – Bureau des Utilisateur de GANIL**

**GANIL Users Committee**

**NEW MEMBERS NEEDED !!**

If you want to help improving conditions for users

If you have ideas on improvements and developments

(beams, ion sources, ...)

If you want to be involved in decisions about future of GANIL

**Please contact me !**

**FURTHER: our meetings are always announced on BUG website**

you can obtain the agenda from me a few days before

If you want to join a meeting, you are welcome (contact me)

[gerda.neyens@fys.kuleuven.be](mailto:gerda.neyens@fys.kuleuven.be)

# BUG – Bureau des Utilisateur de GANIL

## GANIL Users Committee

### ***INPUT from users needed:***

- electronics pool at GANIL ◇ what do we expect ?
  - what happens at other facilities ?
  - what should be provided at GANIL, what by the users ?
- do users need pulsed primary beams (stable / radioactive) ?
- which info is missing or not easy to find on GANIL web-site ?
- is there interest in using NAUTILUS ?

# Radioactive calibration sources at GANIL

A review of the users requests:

Source type	Isotope	Energy (MeV)	T <sub>1/2</sub>	AVAILABILITY
α	<sup>228</sup> Th ◇ ( <sup>212</sup> Bi, <sup>212</sup> Po)	6.05-6.09 (doublet) 8.78	1.9 y	
		<b>ACTION: to be purchased in 2006</b> 45 kBq, safety issues to be considered		
e-, gamma:	<sup>133</sup> Ba	from 53 to 384	10.5 y	2 (20 and 400 kBq)
	<sup>137</sup> Cs	662	30.1 y	3 (4,40,400 kBq)
	<sup>152</sup> Eu	from 122 to 1408	13.5 y	3 (~ 30-40 kBq)
		<b>ACTION: to be purchased in 2006-2007</b>		
	<sup>207</sup> Pb	570,1064,1770	31.6 y	1
		<b>ACTION: to be purchased (less urgent)</b>		

<sup>54</sup> Mn	835	312 d
<sup>56</sup> Co	from 847 to 3273	77 d
<sup>85</sup> Sr	514	65 d
<sup>88</sup> Y	898, 1836	107 d
<sup>113</sup> Sn	392	115 d
<sup>141</sup> Ce	145	32 d
<sup>203</sup> Hg	from 847 to 3273	47 d

Short-lived:  
Expensive  
Difficult to manage

## PRIORITIES for SPIRAL developments

see also presentation G. Gaubert, Wednesday 18:15.

Taking into account the BUG inquiry about SPIRAL beams and the letters of intent presented in December 2004 to the GANIL PAC, a preliminary list of beam development priorities was defined. It will be studied by the GANIL SAC after the next PAC meeting (Nov. 2006), and taking into account the letters of intent to be submitted.

The preliminary list of priorities is the following:

- 1. Surface ion source.** For alkaline ions ( ${}^7\text{Li}$ ,  ${}^{23}\text{Na}$ , ..)  
It is planned to couple this surface ion source (Nanonake) with a  $1^+/n^+$  charge breeder.
- 2. 3 kW targets.** The beams under study, for which demand is strong, are  ${}^8\text{He}^{2+}$ ,  ${}^{24}\text{Ne}$ ,  ${}^{33,34,42,44}\text{Ar}$  and  ${}^{72,74}\text{Kr}$ . Simultaneously, an intense beam (above 600 kW) of  ${}^{78}\text{Kr}$  will be developed.
- 3. Fast ECR  $1^+$  source.** This type of source (Mono1000) can be used to extract ions rapidly in a  $1^+$  charge state (for short-lived isotopes, such as  ${}^{13}\text{O}$  and  ${}^{31}\text{Ar}$ ). This source is also advantageous for extracting volatile species (P and S). A study on the extraction times of refractory elements will be conducted. It will also be necessary to examine the coupling with a  $1^+/n^+$  charge breeder.