





### **HADES 2007:** Storage, Transports, Measurements, **Developments**

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### **Storage + transports**





**Detectors** 

**Crystals** 



Strange white powder





## **Storage + transports**

- All germanium safe in HADES (at least last time I was there)
- 24 transports during 2006 (12 so far 2007)
- Presently at HADES: 1 detector, 4 boxes with GeO<sub>2</sub>, 9 crystals
  (4 x Genius, RG I + RG II, ANG II V)

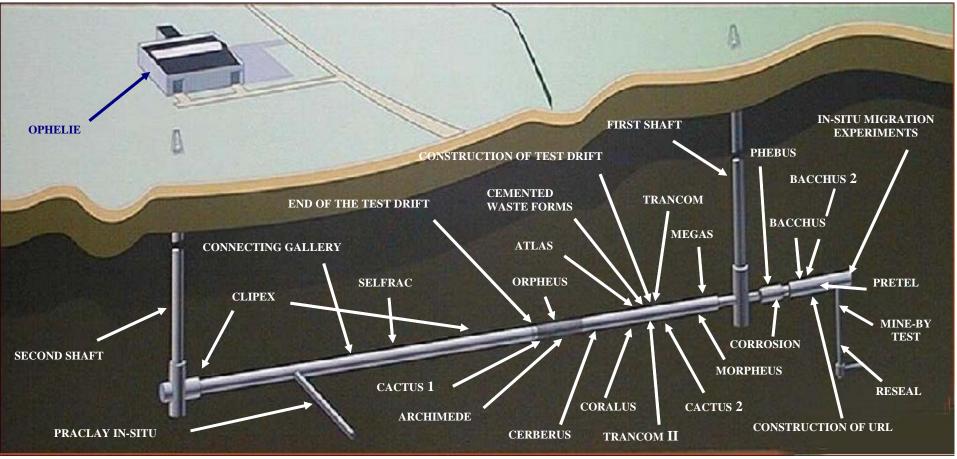


### **Developments in HADES**

#### HADES = High Activity Disposal Experimental Site



Located at SCK•CEN, Mol, Belgium, operated by EURIDICE







#### **Developments in HADES**









# **Developments in HADES**



- New gallery will be excavated during 2007 for the **PRACLAY experiment** (safeguard operation for quite long)
- Detector Ge-8 (Low-E detector) installed, calibrated and operational in a temporary lead shield – developments on "Monte Carlo" calibration
- Detectors have been moved around to make room for new installations
- Sandwich detector installed and running since December 2006.



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### **Developments in HADES**





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#### **Detectors in HADES**

	Detector			<b>Relative efficiency</b>	Year
	name	Manufacturer	Crystal type	(%)	installed
	Ge-2	Eurisys	n-type semiplanar	8	1995
andwich	Ge-3	Eurisys	p-type coaxial	60	1997
	Ge-4	Canberra	p-type coaxial (XTRa)	106	2000
	Ge-5	Canberra	p-type planar (BEGe)	50	2001
		Canberra /			
	Ge-6	Ortec	p-type coaxial	80	2004
			p-type coaxial (XTRa)		
	Ge-7	Canberra	with inverted head	80	2005
	Ge-8	Canberra	p-type planar (BEGe)	38	2006
	Ge-9	?	Well-type/sandwich-2		2008 ?

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## **Radiopurity Measurements**

- Sand / glass (Ge-T2 / Ge-5)
- Nylon (Ge-4)
- Welding rods (unclean / clean) (Ge-4)









# Welcome to IRMM in Geel

- June 11-13 (Mon-Wed)
- Try to arrange joint transports if you come by plane
- Consider if you are interested in visits to
  - Umicore
  - Canberra
  - HADES
  - Radinuclide Metrology at IRMM

