

Status of AGATA detectors

- ❑ AGATA single detectors
- ❑ AGATA triple cluster detectors
- ❑ Future detectors

AGATA single detectors

Seventeen AGATA detectors were delivered:

A001, A002, A003, A004, A005, A006

B001, B002, B003, B004, B005, B006

C001, C002, C003, C004, C005

Ten AGATA detectors are tested and available:

A001, A002, A003, A004, **A005**, A006

B001, **B002, B003**, B004, B005, B006

C001, C002, C003, C004, **C005**

Location and usage of ten available detector:

- Three asymmetric triple clusters ATC:

ATC1 at Legnaro: **A001, B002, C002**

ATC2 at IKP: **A003, B003, C005**

ATC3 at IKP: **A002, B005, C003**

- Scanning: **C001** at Liverpool
A005 at Orsay (not started)

AGATA single detectors

Seventeen AGATA detectors were delivered:

A001, A002, A003, A004, A005, A006

B001, B002, B003, B004, B005, B006

C001, C002, C003, C004, C005

Seven AGATA detectors are not available:

A001, A002, A003, **A004**, A005, **A006**

B001, B002, B003, **B004**, **B005**, **B006**

C001, C002, C003, **C004**, C005

Location and usage of seven detector:

- at customer acceptance test:

A006 at CEA

B005 at IKP in ATC3 for CAT and ATC3 commissioning

- at Ankara: **A004**, **B004**, **C004** one ok, one broken, one untested
- at IKP to be repaired: **B006**
- at Canberra for repair: **B001**

Yield of customer acceptance test

type	accepted	available	# CATs	# Cats ongoing
<i>sym</i>	3	3	3	-
A	4 out of 6	4 out of 6	10	1 (A006)
B	3 out of 6	2 out of 6	9	1 (B005)
C	5 out of 5	4 out of 5	6	
Sum asym. det.	12 out of 17	10 out of 17	25	2

- 10 available detectors
- 12 positive CATs (effort ~ 1 man week/CAT)
- 13 negative CATs (effort > 2 man week/CAT)

More than 50% of the detectors did not pass the customer acceptance test of the AGATA collaboration!

AGATA single detector failures

A001* : hole trapping

A002* : leakage current

A003* : leakage current

A004*: several segments out of spec for 1.3 MeV

A005*: leakage current

B001* : segments out of specs

B001*: leakage current

B004*: one missing segment

B004: leakage current one

B005*: leakage current

C003* - leakage current after CAT

B006 - leakage current after CAT

Two accepted detectors suffer from leakage current.

Failures due to:

- leakage current 66%
- segments, crystal, missing contact

AGATA Triple Cluster Detectors

1st triple cluster at Legnaro

2nd triple cluster at IKP tested, operational

3rd triple cluster at IKP commissioning

Future AGATA detectors

Seventeen AGATA detectors were delivered:

A001, A002, A003, A004, A005, A006

B001, B002, B003, B004, B005, B006

C001, C002, C003, C004, C005

B001 : 31 July 2009 (after repair).

Six more detectors were ordered:

Italy INFN:

A007 : 31 May 2009

C006 : 31 July 2009

Germany: A008, B008, C008, B007

A008 : 31 October 2009

B007 : 31 December 2009

B008 : 28 February 2010

C007 : 30 April 2010

CANBERRA, France (30 March, 2009):

Please note that our goal is to deliver 3 AGATA capsules of this Cologne order before end 2009.

Future AGATA triple cluster detectors

Four more detectors are funded:

Italy: C008

UK: A009, B009, C009

CANBERRA, France (30 March, 2009) :

We commit on the tender response for 3 capsules to the following schedule:

University Liverpool: 1st capsule end of August 2010
2nd capsule end of October 2010
3rd capsule end of December 2010.

Perspective for asymmetric triple clusters

ATC1: **A001, B002, C002**

ATC2: **A003, B003, C005**

ATC3: **A002, B005, C003** B005 CAT

ATC4: A004, B004, C004 import from Turkey, one CAT, one repair

ATC5: A005, B001, C001 A005 CAT, B001 repair, C001 scan

ATC6: A006, B006, C006 A006 CAT, B006 repair, C006 delivery July2009

ATC7: A007, B007, C007 delivery: C007 April 2010

ATC8: A008, B008, C008 delivery: February 2010, Italian order

ATC9: A009, B009, C009 delivery: December 2010