



Space for Earth



From atoms to pebbles
HERSCHEL's view of
Star and Planet Formation

20 to 23 March, 2012
Grenoble, France



Welcome to Grenoble

Jean-Louis MONIN IPAG - OSUG



énergie atomique • énergies alternatives



Thank you



Jean-Charles Augereau
Michel Rouzé



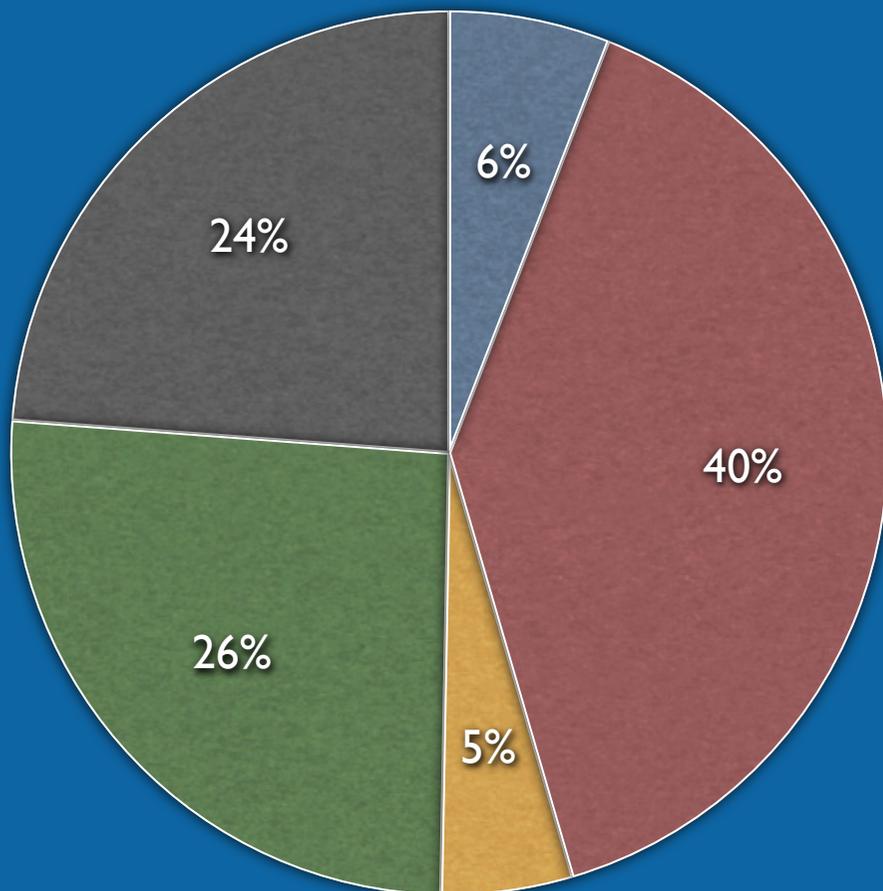
LOC+

Laurence Amen - A. Bacmann - P. Boucheron
C. Ceccarelli - B. Darolles - A. Faure - P. Hily-Blant
S. Maret - F. Ménard - C. Monsan - C. Pinte
M. Soulier - M.H. Sztefek - W. F.Thi - L. Wiesenfeld
- A. Bonsort - I. Joncour - N. Cauchies
IPAG PhDs & Post-Docs



Star and Planet Formation

Key Programme AO Statistics (ESA 2008)
GT + OT programmes



- Solar System
- ISM/Star Formation
- Stars
- Galaxies/AGN
- Cosmology

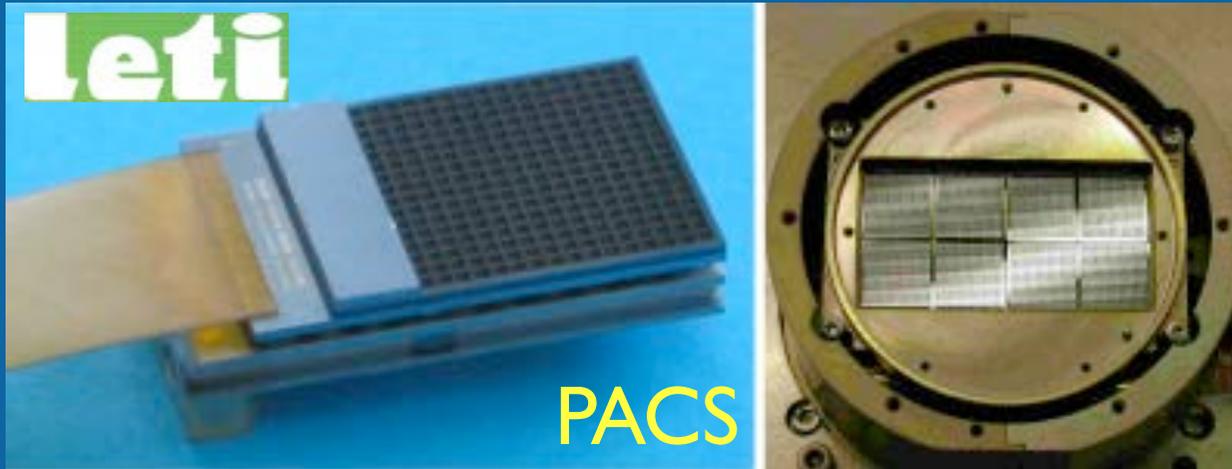
51 %

Institut de Planétologie et d'Astrophysique de Grenoble

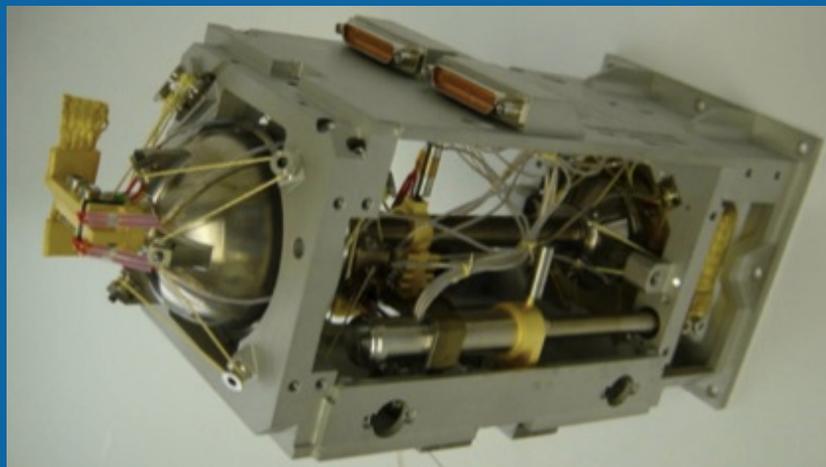
CHESS - DEBRIS - DIGIT - DUNES - GASPS - HOPS



Grenoble laboratories investment in Herschel

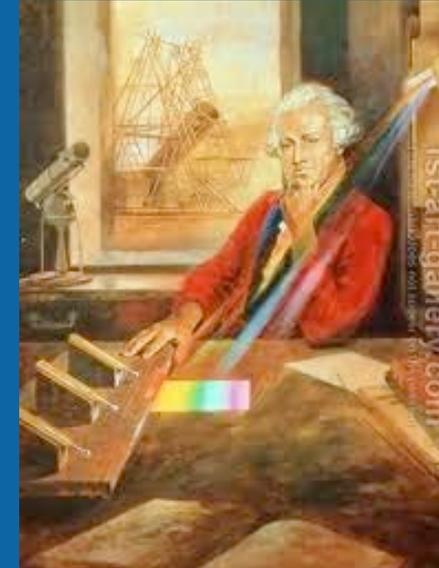


PACS detector

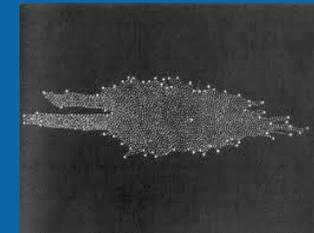
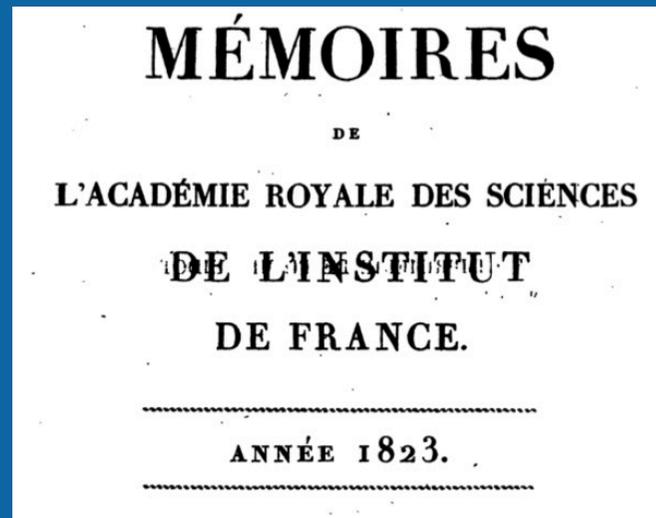


PACS & SPIRE
0.3 K cryocooler

Joseph Fourier and William Herschel



$$\int f(t) e^{2i\pi\nu t} dt$$



Our successors will have the chance to admire other stars, other worlds and new phenomena (...)

Our view of the heavens may change, but in future epochs, the memory of Herschel will remain (...)

Without doubt, a more complete knowledge of the heavens is reserved for future generations.

Alors des révolutions entières seront accomplies, nos successeurs admireront d'autres phénomènes et d'autres astres (...)

Une partie du spectacle des cieux sera changée : mais à ces époques reculées, la mémoire d'Herschel subsistera tout entière (...)

Sans doute une connaissance plus complète de l'histoire du ciel est réservée aux générations à venir.

Have a very nice and very fruitful workshop !



Monthly Notices
ROYAL ASTRONOMICAL SOCIETY
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GOODS-*Herschel*: the far-infrared view of star formation in active galactic nucleus host galaxies since $z \approx 3$

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ABSTRACT

We present a study of the infrared properties of X-ray selected, moderate-luminosity (i.e. $L_X = 10^{42} - 10^{44}$ erg s⁻¹) active galactic nuclei (AGNs) up to $z \approx 3$, in order to explore the links between star formation in galaxies and accretion on to their central black holes. We use 100 and 160 μ m fluxes from GOODS-*Herschel* – the deepest survey yet undertaken by the *Herschel* telescope – and show that in the vast majority of cases (i.e. >94 per cent) these fluxes are dominated by emission from the host galaxy. As such, these far-infrared bands provide an uncontaminated view of star formation in the AGN host galaxies. We find no evidence of any correlation between the X-ray and infrared luminosities of moderate AGNs, at any redshift, suggesting that star formation is decoupled from moderate AGN activity.

