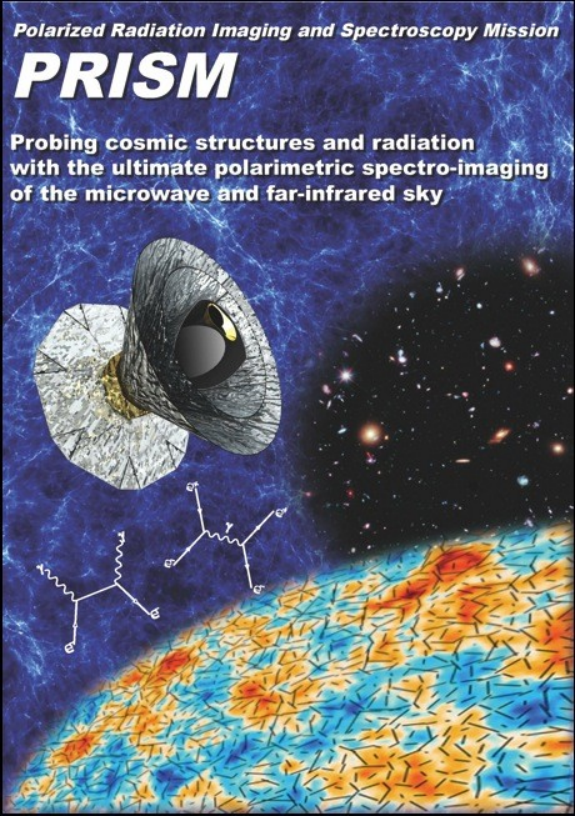


COrE / PRISM workshop for a M4 ESA mission
Laboratoire Astroparticule et Cosmologie
Paris, 10-11.02.2014

Cosmology with PRISM – Polish commitment

Marek Biesiada

Institute of Physics,
University of Silesia,
Katowice, Poland

On behalf of Polish supporters of PRISM Project

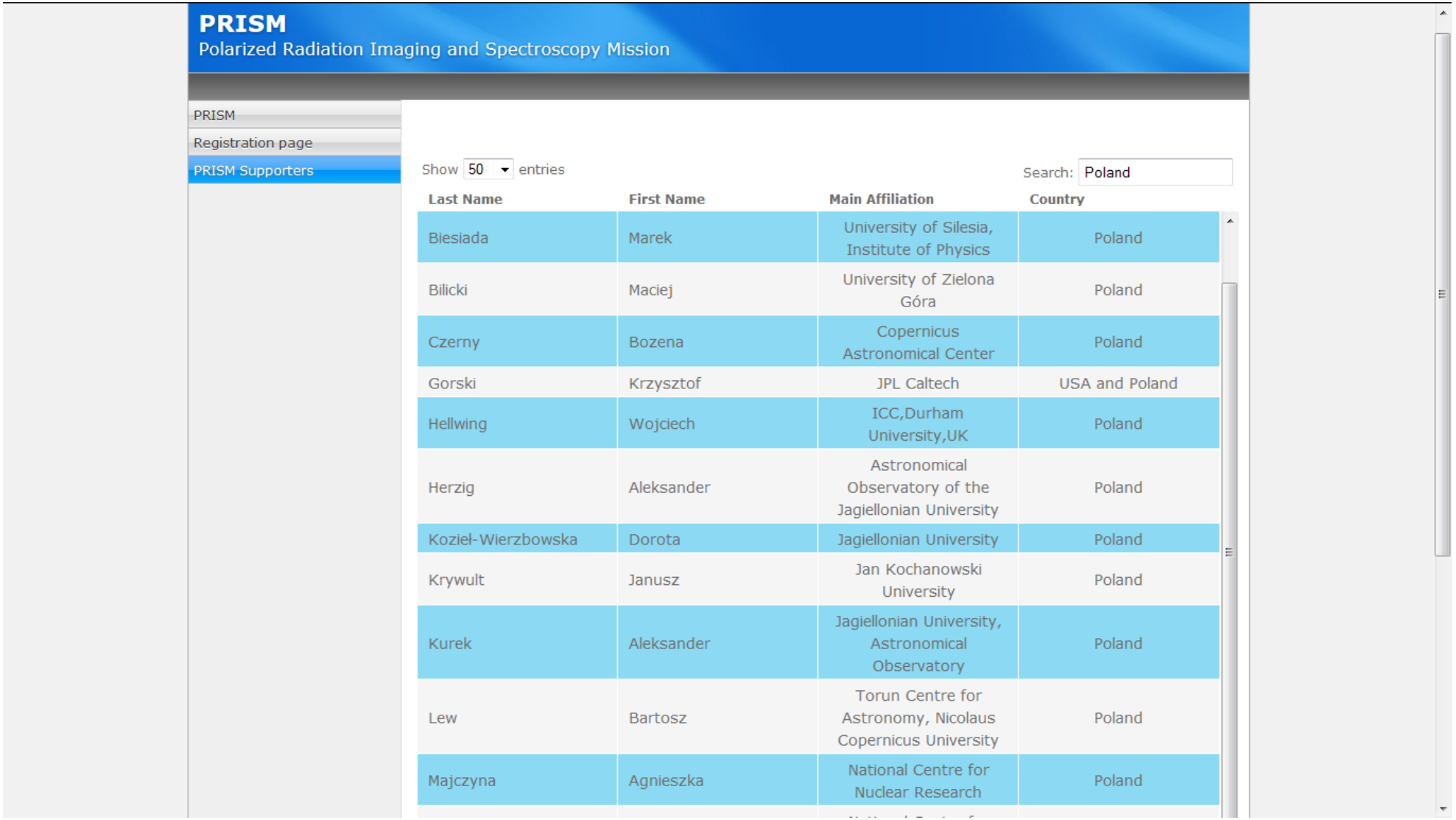
Agnieszka Pollo
Bożena Czerny
Agata Różańska
Wojciech Hellwing
Boud Roukema
Włodzimierz Piechocki
Jakub Mielczarek

...

22 in total

22 people from Poland supported PRISM project

Interests: galaxy evolution and LSS
strong lensing
tests of DE



PRISM
Polarized Radiation Imaging and Spectroscopy Mission

PRISM
Registration page
PRISM Supporters

Show 50 entries Search: Poland

Last Name	First Name	Main Affiliation	Country
Biesiada	Marek	University of Silesia, Institute of Physics	Poland
Bilicki	Maciej	University of Zielona Góra	Poland
Czerny	Bozena	Copernicus Astronomical Center	Poland
Gorski	Krzysztof	JPL Caltech	USA and Poland
Hellwing	Wojciech	ICC,Durham University,UK	Poland
Herzig	Aleksander	Astronomical Observatory of the Jagiellonian University	Poland
Kozieł-Wierzbowska	Dorota	Jagiellonian University	Poland
Krywult	Janusz	Jan Kochanowski University	Poland
Kurek	Aleksander	Jagiellonian University, Astronomical Observatory	Poland
Lew	Bartosz	Torun Centre for Astronomy, Nicolaus Copernicus University	Poland
Majczyna	Agnieszka	National Centre for Nuclear Research	Poland

Closer-than-the-CMB Universe

- Emission from dusty galaxies:
  - evolution
  - clustering

A. Pollo

VIMOS/VIPERS

- Evolution of magnetic fields in galaxies and clusters?
- Probing gravitational clustering signal from very small to very large scales, at different cosmic epochs

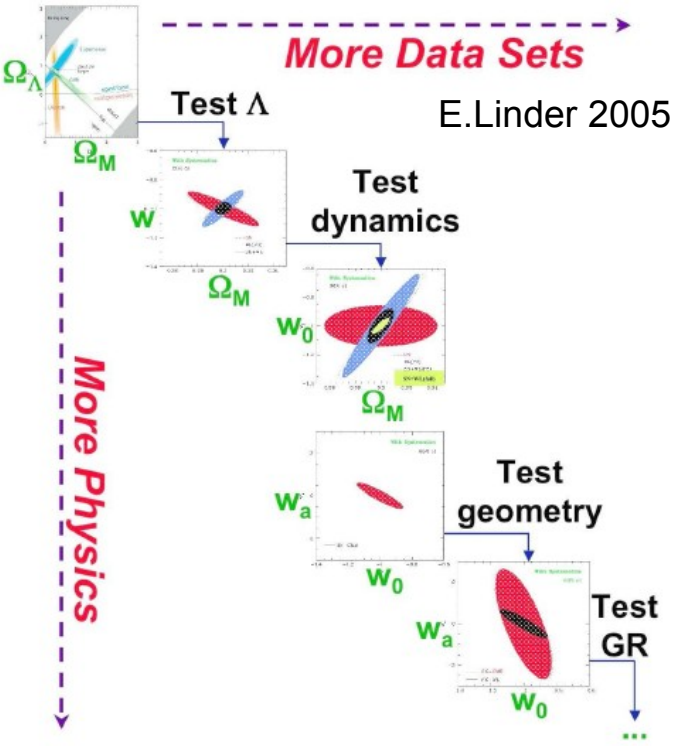
- **Multi-wavelength analysis of the galaxy properties**
- **Application of AGNs for cosmological measurements**

B. Czerny

Comprehensive picture of links between galaxy evolution and LSS development

Dark Energy with Gravitational lensing

M.B.
A.Piórkowska



- Strong lensing by clusters (existing data + Euclid legacy)

Multi-probe approach

- X-ray gas fraction (XMM-Newton + eROSITA)

- Sunyaev – Zel'dovich (ACT + Planck + COrE/PRISM)

- CMB lensing (COrE/PRISM)

Tests of

Dark Energy models and Modified Gravity

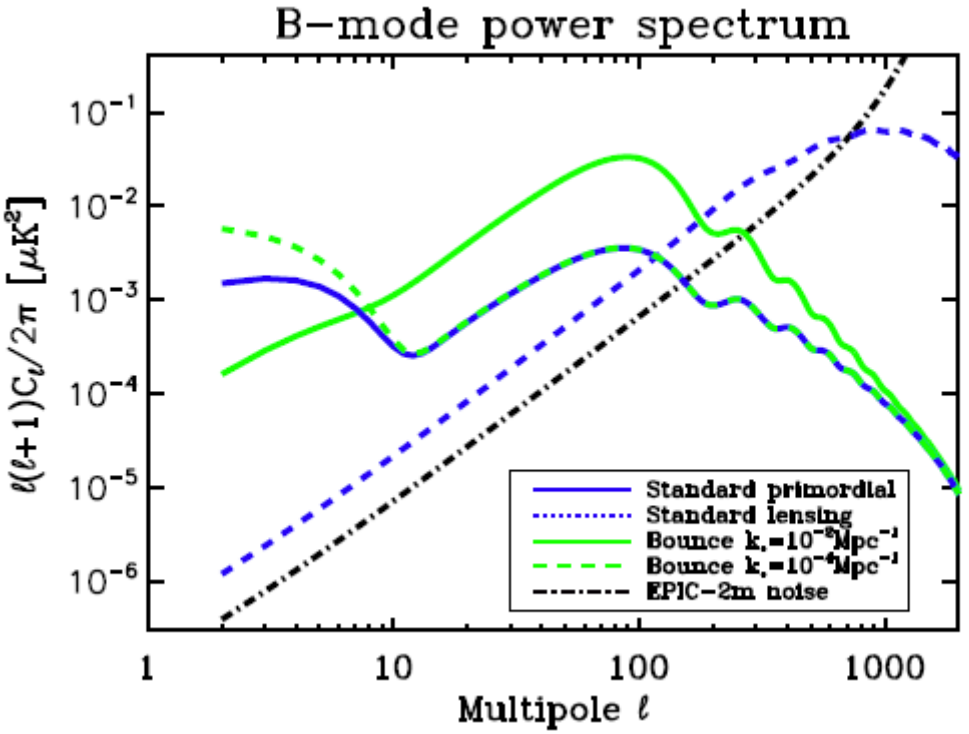
Theory

- Loop Quantum Gravity
  - predictions

J.Mielczarek, A. Barrau, J. Grain

W.Piechocki

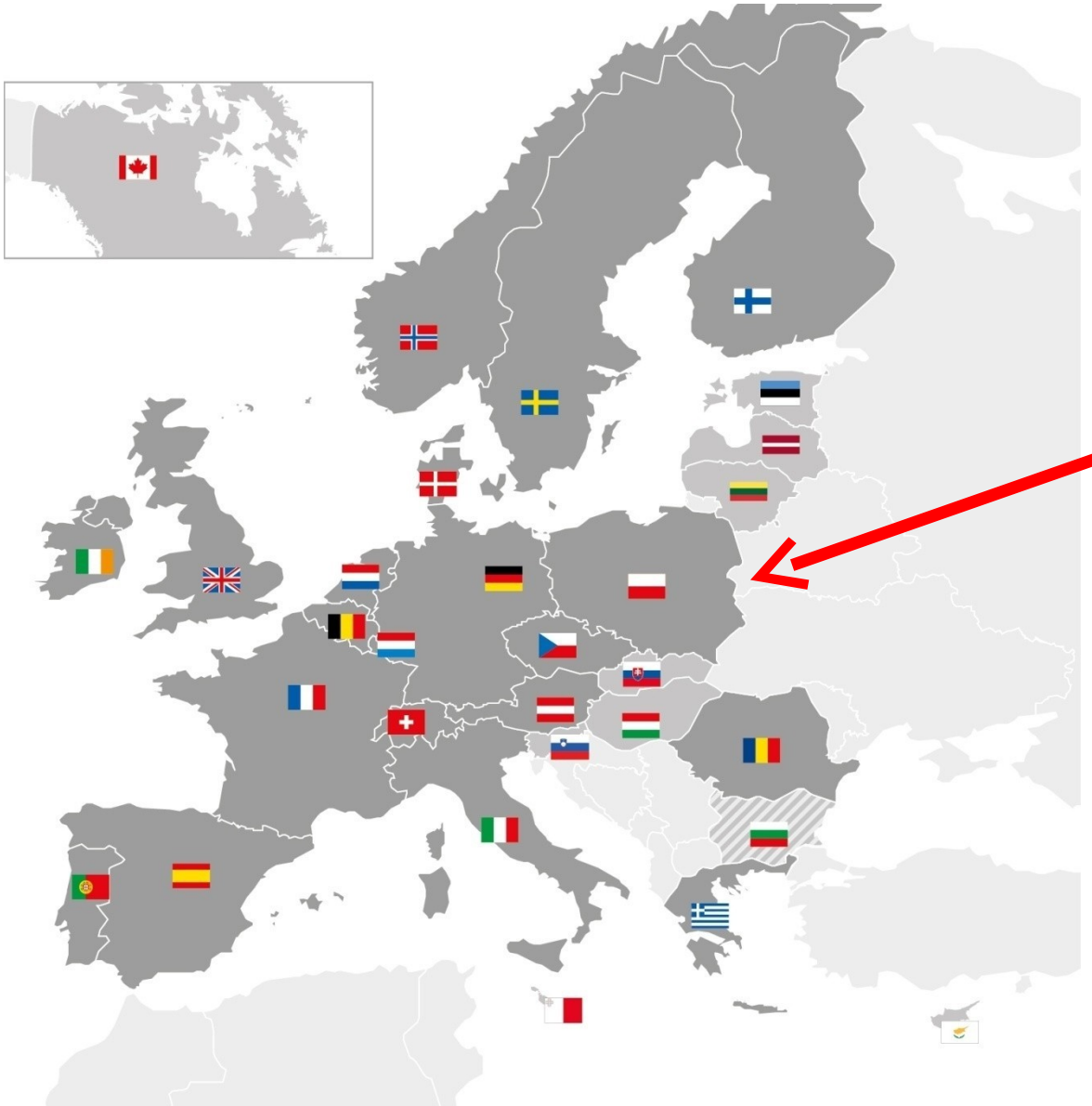
- Zygmunt Lalak (Warsaw Group)
  Early Universe, baryogenesis and leptogenesis, dark matter
- Mariusz Dąbrowski
  (Szczecin Group)
  Inflation, supersting cosmology, quantum cosmology



J. Grain, A. Barrau, T. Cailleteau and J. Mielczarek, Phys. Rev. D 82 (2010) 123520

space for europe

esa



Poland is an ESA member since 13 sep. 2012

Space Research Centre
Polish Academy of Sciences
Bartycka 18A, 00-716 Warsaw, phone.: +48 22 4966 200, fax: 022 840 31 31

Specific Projects:

BRITE – PL first Polish Scientific Satellite launched
21 Nov. 2013
on Russian Dnepr rocket RS-20

HERSCHEL - a high-resolution spectrometer **HIFI**
launched 14 May 2009 on Ariane rocket

INTEGRAL - anti-coincidence electronic system **IBIS**
(**I**mager on **B**oard **I**ntegral **S**atellite) launched 17 Oct 2002
on PROTON rocket from Baikonur

Ongoing

Pointing unit for spectrometer MERTIS in BepiColombo
mission to Mercury (launch in 2015)

Space Research Centre
Polish Academy of Sciences
Bartycka 18A, 00-716 Warsaw, phone.: +48 22 4966 200, fax: 022 840 31 31

Experience with Satellite Instruments

over **50** instruments have been constructed to be launched into space on board rockets, artificial satellites and interplanetary probes.

Projects including: BRITE-PL, CASSINI, INTEGRAL, ROSETTA, HERSCHEL, MARS EXPRESS VENUS EXPRESS

Laboratory of Satellite Applications of FPGA (Field Programmable Gate Array)
The laboratory employs 15 people, including three PhDs and three PhD students.

The laboratory owns complete equipment for designing, constructing, commissioning and testing of advanced digital systems based on FPGA technology, namely:

- on-board computers,
- controller board
- control systems for silicon based CCD and CMOS imaging obtained from these matrices, DSP systems, allowing for the processing of signals with frequencies above 1GHz, and expanded power satellite systems using FPGA technology.

Contact: PhD Eng. Piotr Orleański
piotr.olreanski@cbk.waw.pl