ANDEAN REGIONAL OFFICE OF ASTRONOMY FOR DEVELOPMENT

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COUNTRIES

- 6 signing countries
- 1 expressed interest

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PEOPLE IN THE ANDES (M)

- 150 million people

PROFESSIONAL ASTRONOMERS

- 160 with PhDs and "permanent" positions in Universities/Research Centers
- Chile: "accompanying country"

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INSTITUTIONS IN THE ANDEAN ROAD

- Chile: "accompanying country"

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COORDINATION

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Workshop Astronomía en los Andes (2013, 2015, 2018?)

Biannual Andean ROAD Meeting

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2013

2015

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COMMUNICATING ASTRONOMY WITH THE PUBLIC 2016 (TF2, TF3)

- Medellín, Colombia
- Several workshops about best practices and new ways to engage with the public

LARIM: LATIN AMERICAN IAU MEETING, CARTAGENA, COLOMBIA, 2016

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LARIM: LATIN AMERICAN IAU MEETING, CARTAGENA, COLOMBIA, 2016

- OAD Workshop, all slides at https://andeanroad.github.io/WorkshopLARIM2016/

Program

Part 1. Current activities (2PM - 3PM)

- Piero Benvenuti. The Importance of the OAD to the IAU. (15 min)
- Ramasamy Venugopal. Astronomy for Development in the Latin American region. (15 min)
- Sze-leung Cheung. Astronomy for Everyone - the IAU Office for Astronomy Outreach. (15 min)
- Jaime Forero-Romero. The Andean Regional Office of Astronomy for Development. (15 min)

Part 2. Working for impact (3PM - 4PM)

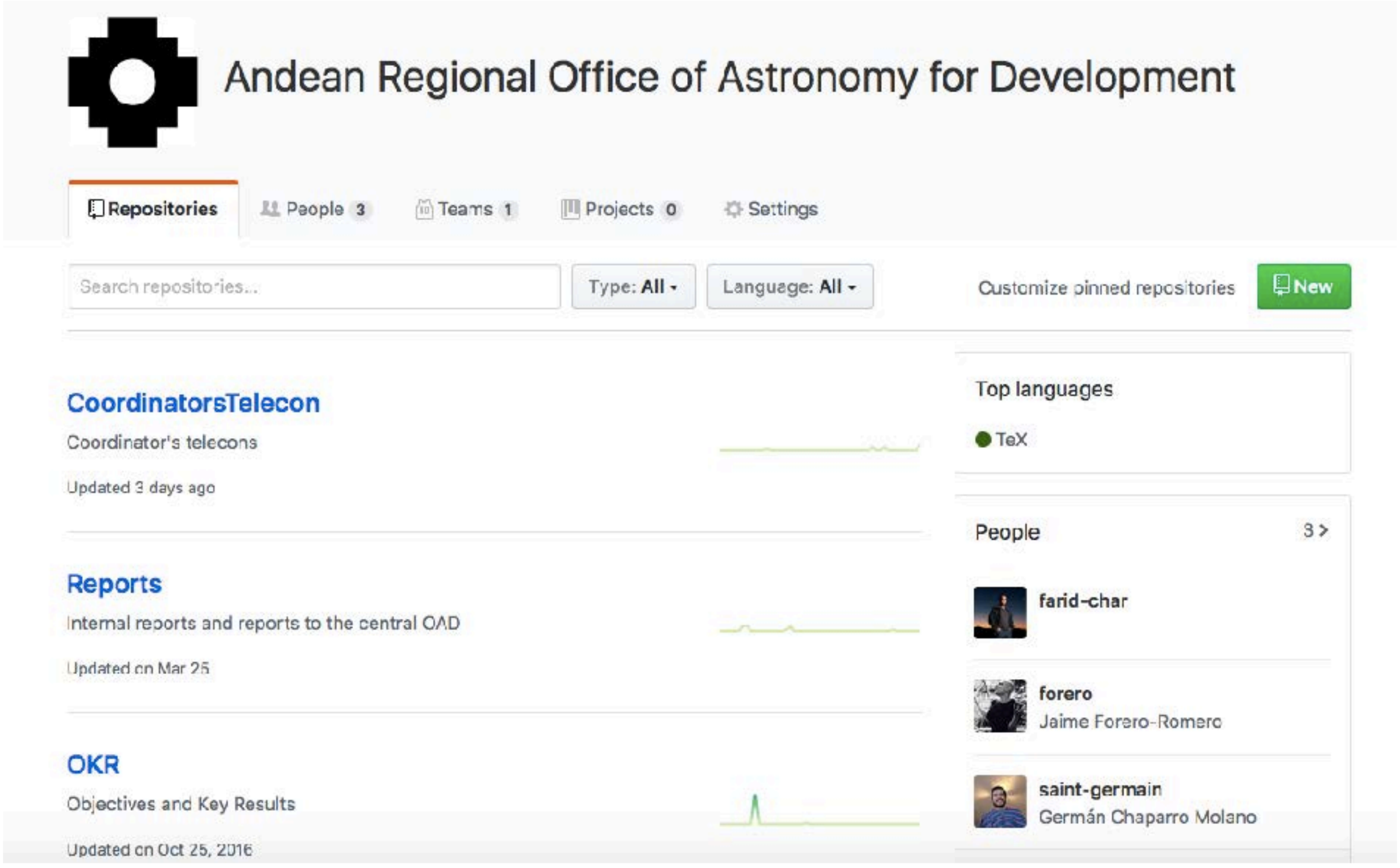
- Ramasamy Venugopal. Working towards impact. (15 min)
- Jaime Forero Romero. Development views from America. (15 min)
- Pablo Abitbol. Introduction to Development Theories. (30 min)

Part 3. Roads to collaboration (4PM - 5PM)

- Hugo Levato, Beatriz Garcia, Guillermo Bosch. Argentinian Involvement with the OAD (20 min).
- Open participation from the public.

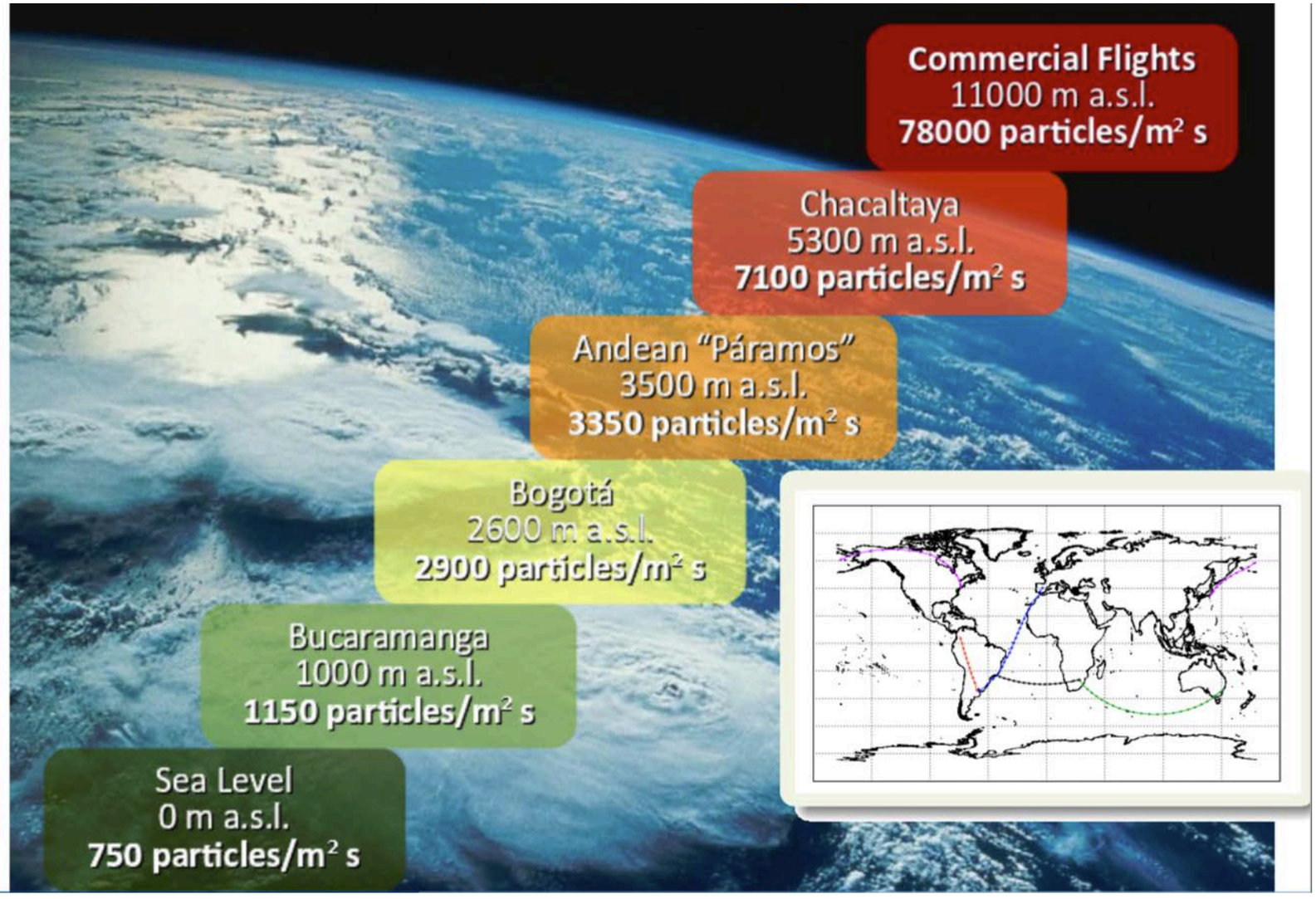
Open access via GitHub project repositories

https://github.com/AndeanROAD



ASTROPARTICLE PHYSICS WORKING GROUP (TF1)

➤ Coordinator: Luis Núñez (UIS, Colombia) lnunez@uis.edu.co



LAGO

The Latin American Giant Observatory (LAGO) Project

A very long baseline "array" of water Cherenkov detectors (WCD)

- Sites at eight countries: Argentina, Bolivia, Colombia, Ecuador, Guatemala, México, Perú & Venezuela
- Two new detectors in Brazil will be incorporated by 2016

The LAGO Collaboration

- 80 members from 25 institutions at 10 LA countries
- **Scientific goals**:
  - Astroparticles up to the CR knee
  - Study transient and long term Space Weather phenomena trough Solar modulation (SM) of Cosmic Rays (CR)
  - Measurements of background radiation at ground level
- **Academic goals**:
  - Train latin-american students in HEP and Astroparticle techniques
  - Build a Latin-American network of Astroparticle researchers

RADIO ASTRONOMY WORKING GROUP (TF1)

- Coordinator: Oscar Restrepo (U. de Chile)
  orestrepog@ecci.edu.co

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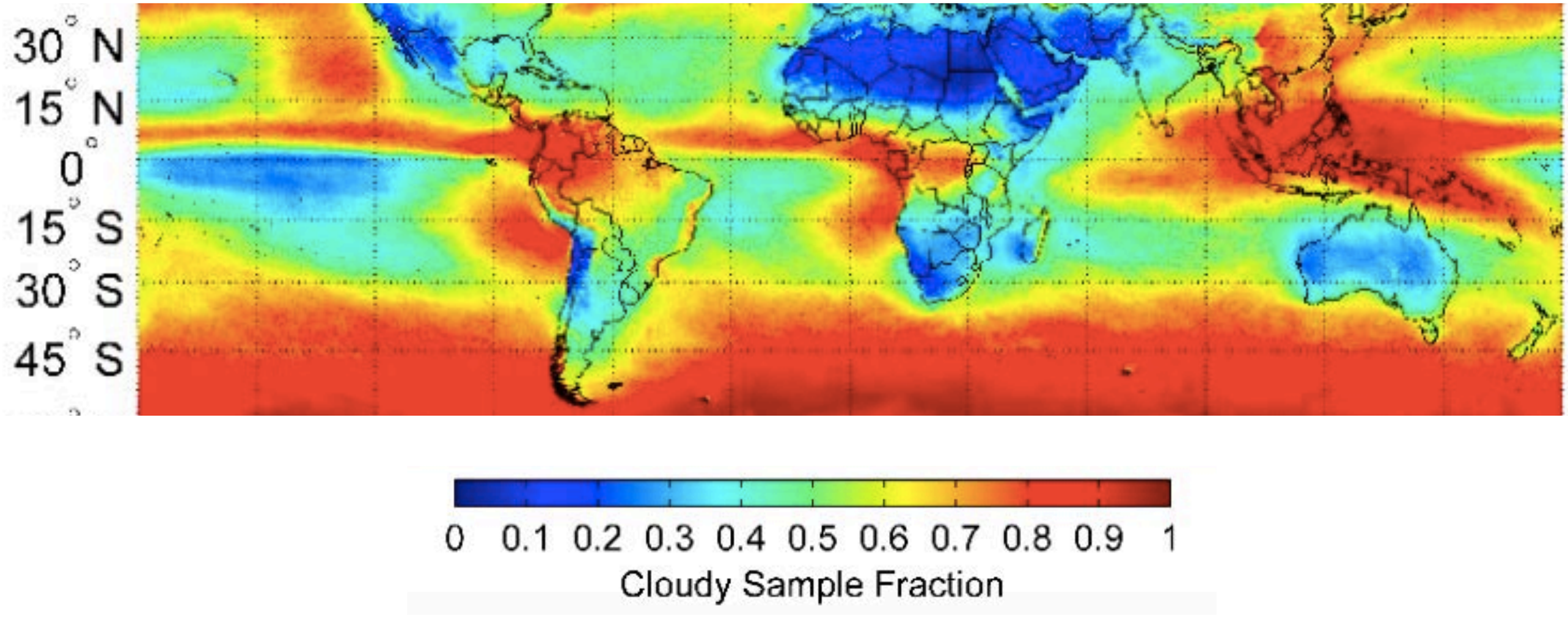

Suen et al 2014

ANDEAN ASTRONOMY AND ASTROPHYSICS SCHOOL (TF1)

- Biannual school for advanced BSc and MSc students

ANDEAN MOOCS (TF1, TF2)

- **Astrophysics - Computer Science (TF1)**
  - Attached to Astroparticle Physics WG
  - In alpha-phase

- **Erathostenes@Schools (TF2)**
  - Text material is ready
  - Some video material is ready: http://bit.ly/2rrfuTz
  - Colombia - Venezuela

ASTRONOMY FOR PEOPLE WITH PHYSICAL DISADVANTAGES (TF2, TF3)

CURRENTLY BROWSING CATEGORY

Astronomy with all Senses

Overview of the project

2015/12/01 | Filed under: 2016, Astronomy with all Senses, Latin America + Caribbean, TF3 funded projects

Project leader: Nayive Rodriguez, nrodri70@gmail.com Project location: Colombia Project Description: 'Astronomy with all senses' is a traveling exhibition, specially designed for people with physical disadvantages in order to let them know about astronomy and other space science and inspire them with the wonders of the universe. For people with normal ...

Handbook (in Spanish) at:

http://www.astro4dev.org/wp-content/uploads/2017/01/Final-handbook-Astronomy-with-all-Senses.pdf

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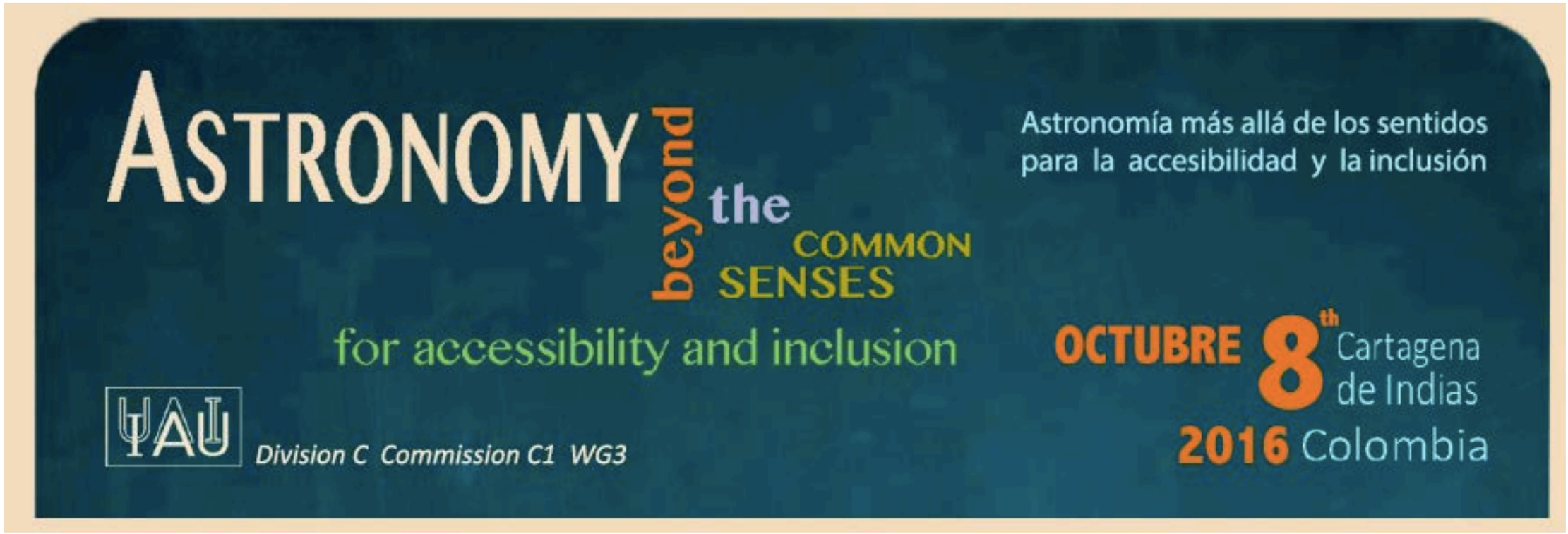
ASTRONOMY FOR PEOPLE WITH PHYSICAL DISADVANTAGES (TF2, TF3)

HAZ TU PROPIA MALETA

Cada una de las actividades propuestas para la Maleta de Astronomía con todos los sentidos están pensadas para que puedan ser adaptables y replicadas en contextos diversos. La réplica de las actividades, en su mayoría son adaptables a materiales de bajo costo y de fácil acceso.

A continuación se presentan algunas sugerencias para realizar cada una de las actividades mencionadas a lo largo de este documento.

ASTRONOMY FOR PEOPLE WITH PHYSICAL DISADVANTAGES (TF2, TF3)



UNIVERSIDAD NACIONAL DE COLOMBIA SEDE BOGOTÁ FACULTAD DE CIENCIAS

UNIVERSIDAD DE CARTAGENA

parque explora MEDELLÍN

PLANETARIO DE MEDELLÍN

Idartes Instituto Distrital de las Artes

ALCALDÍA MAYOR DE BOGOTÁ D.C. CULTURA, RECREACIÓN Y DEPORTE Instituto Distrital de las Artes

BOGOTÁ MEJOR PARA TODOS

NOT SUPER SUCCESSFUL PROJECTS

- **Andean MSc Astrophysics program (TF1)**
  - Stuck at proposal phase
- **Annual TF2 Meeting**
  - Attached to 3rd Andean ROAD Meeting for now

STRENGTHS

- Fostered communication and collaboration
- Increased researcher and student mobility
- Helped agreements move along faster
- Facilitated funding

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- **Increased social capital**

WEAKNESSES

- Lack of dedicated time results in projects running aground
- Not enough people to have leadership rotation
- Derived projects are hard to scale up or spin off
- Lack of staff at PhD level in specific areas
- Resources for mobility are sporadic
- Support does not carry enough weight outside of OAD community

EXTERNAL ISSUES

- Bureaucracy gets in the way of educational projects
- TF3 community is isolated
- Almost no communication with Bolivia
- Political and civil unrest in Venezuela

WHAT WE WANT

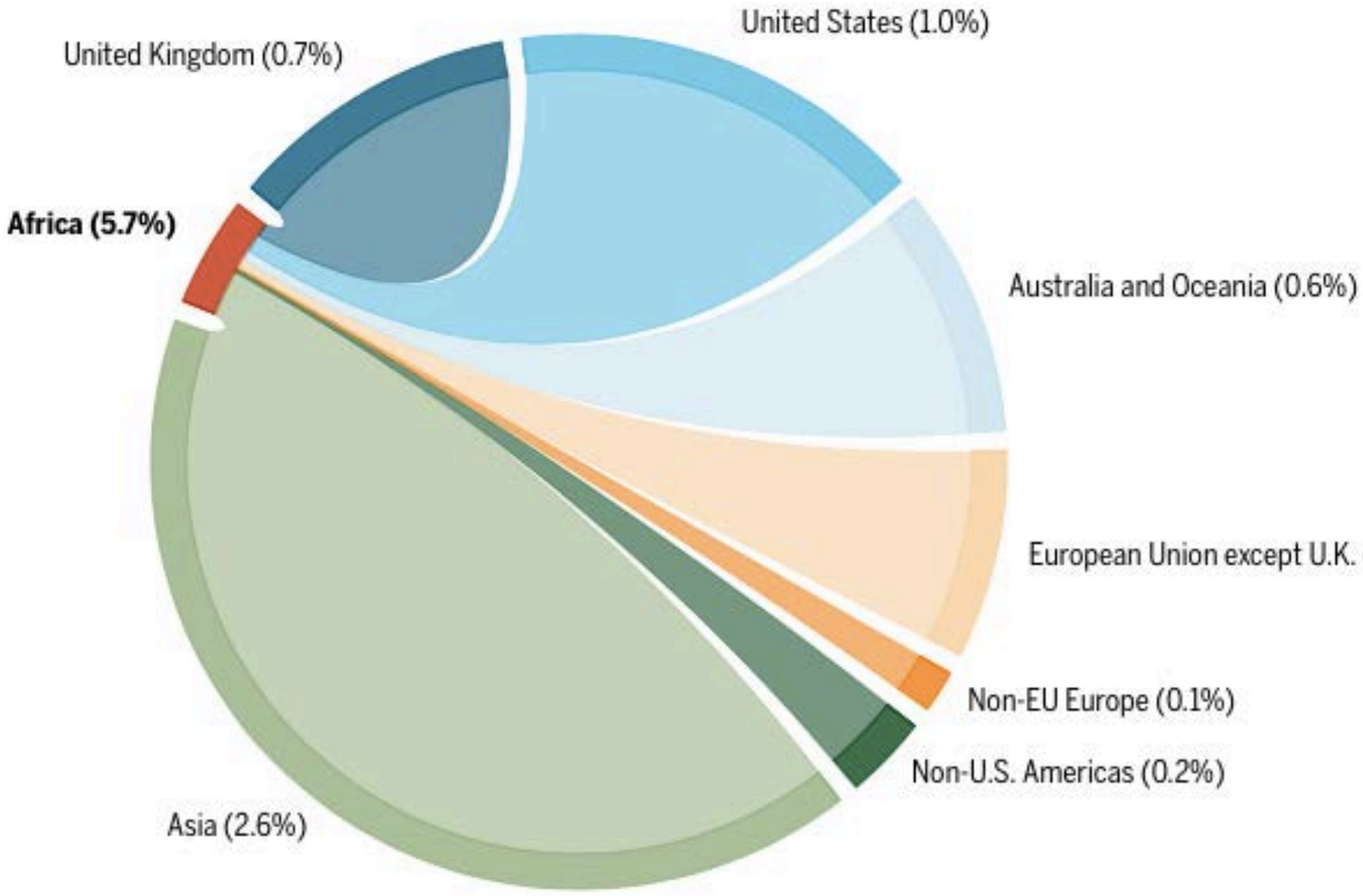
- Humanity advances greatly when we want to achieve what no one else has, not when we do things the old way. Our goal is to transform the way we work as scientists to broaden our impact and help make societies more scientific, more critical, more educated.

- We do not want every child to be a scientist. We want children to become critical, abstract, logical thinkers. When they grow up, they will be conscious, skeptical, informed citizens who will see in themselves the capacity to transform their reality.

- https://innovacionyciencia.com/articulos_cientificos/astronomia_para_el_desarrollo

INTER-REGION MOBILITY

- http://www.sciencemag.org/news/2017/05/vast-set-public-cvs-reveals-world-s-most-migratory-scientists



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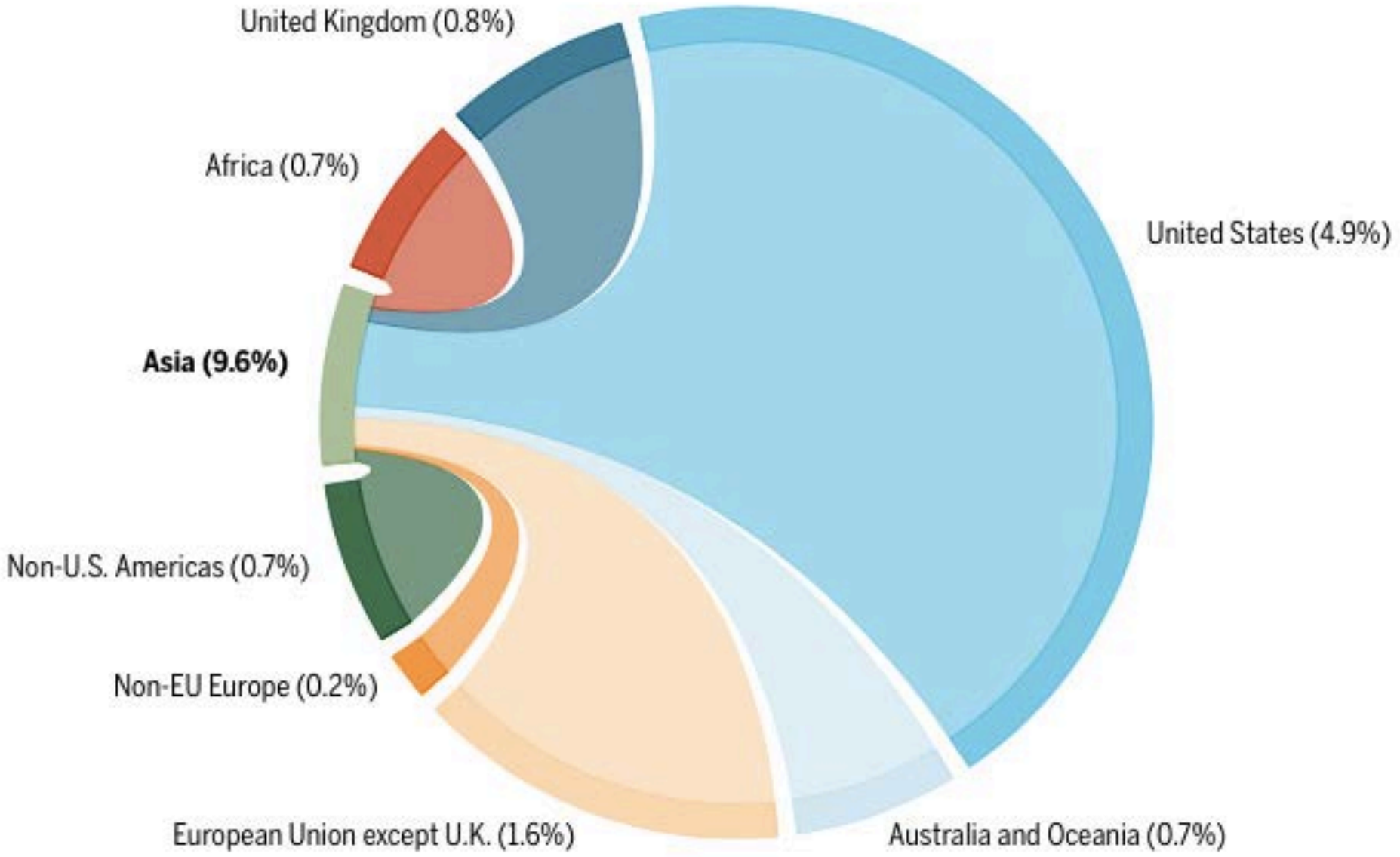

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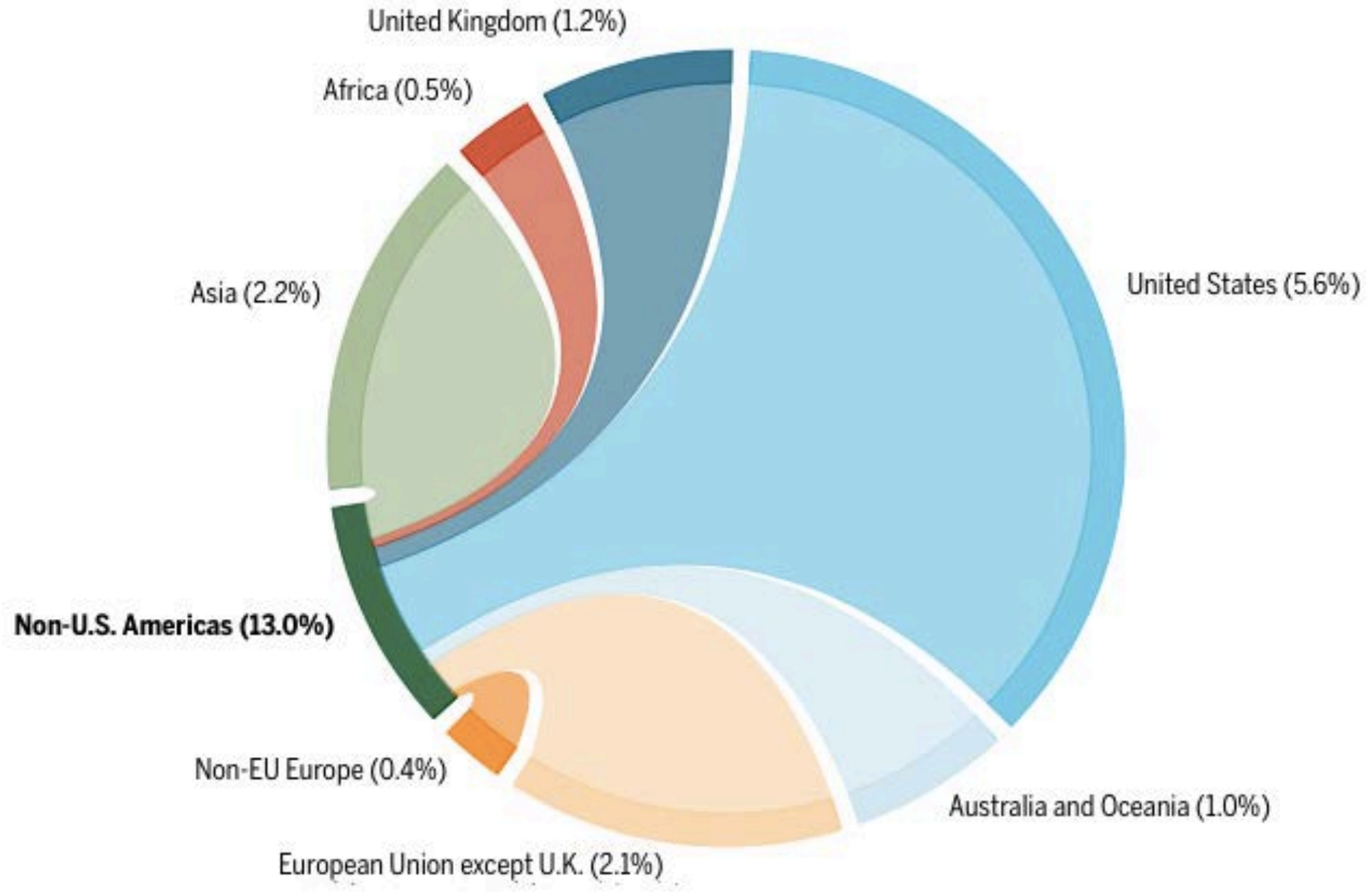

OECD COUNTRIES