

Senior Citizens and Science Centres

New Opportunities for Old Schoolers



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CENTRO
DE CIÊNCIA
VIVA
LAGOS
SCIENCE CENTRE

IN DEPTH

New opportunities for old schoolers



LUIS AZEVEDO RODRIGUES



SARA MIRA

By 2020, in OECD countries,
people over 65
will represent...

Approximately
40%*
of the size
of the working
population

More than
40%**
of total
consumption across
all markets

More than
20%*
of total
population



Why engage seniors?

Engaging seniors

Saturday 11 Jun 2016

09:00 - 10:15

Hall 5, #hall5

PANEL

**Equity & Inclusion
Science ♥ society**

Developing science programmes for adults is a true challenge for most of science centres and museums. They think they know almost everything, they will come only as companions, and they think they're too old to have fun!

It is a priority to engage with seniors. They will be representing an ever-growing part of our ageing societies and we are convinced that not only can they learn and re-learn, but also that they can contribute important points of views and share valuable know-how.

The session will explore pros and cons, physical constraints and motivations.

Convenor



Luis Azevedo Rodrigues

Director
[Centro Ciencia Viva De Lagos](#)
Lagos Portugal
[Twitter](#)

Session speakers



Sara Mira

Science Communicator Manager
[Centro Ciencia Viva De Lagos](#)
Lagos Portugal

"High & Lows with Seniors"

Introducing science concepts might not be the right way for communicating science for adult and senior public, but rather transforming their empirical knowledge into scientific information. Ciência Viva Lagos Science Centre developed science activities to active senior groups or to home care institutions. There are several topics that contribute for a successful session-high and lows on the implementation of senior's activities will be discuss from our experience.



Ivone Fachada

Executive Director
[Science Centre of Bragança](#)
Bragança Portugal

"Science activities for seniors: can we talk about anything?" Bragança

Ciência Viva Centre has a science outreach program for seniors. The main goals are to acquire knowledge in areas of greater scientific importance such as nanotechnology or astronomy; to stimulate critical thinking and to prevent physical inactivity and loneliness. Until 2015 we had over 800 seniors involved. In this session we are presenting the activities developed, how we keep seniors motivated, and a direct result of this outreach program - an intergenerational Marathon of science.



Ayman Elsayed

Director
[Bibliotheca Alexandrina Planetarium Science Center](#)
Alexandria Egypt

"Participate & enjoy parenting-our kids, our treasure" The Planetarium

Science Center of Alexandria offers educational, supportive and customized workshop sessions to parents of children aging 5-9. Understanding middle childhood development, encouraging social-emotional competency, responding to school and family life challenges, fostering positive peer relationships, communicating effectively and strategies for effective, positive discipline in the middle years, are some of the topics addressed.



Ewa Janowska

Project Manager at Science and Art Events Lab
[Copernicus Science Centre](#)
Warsaw Poland

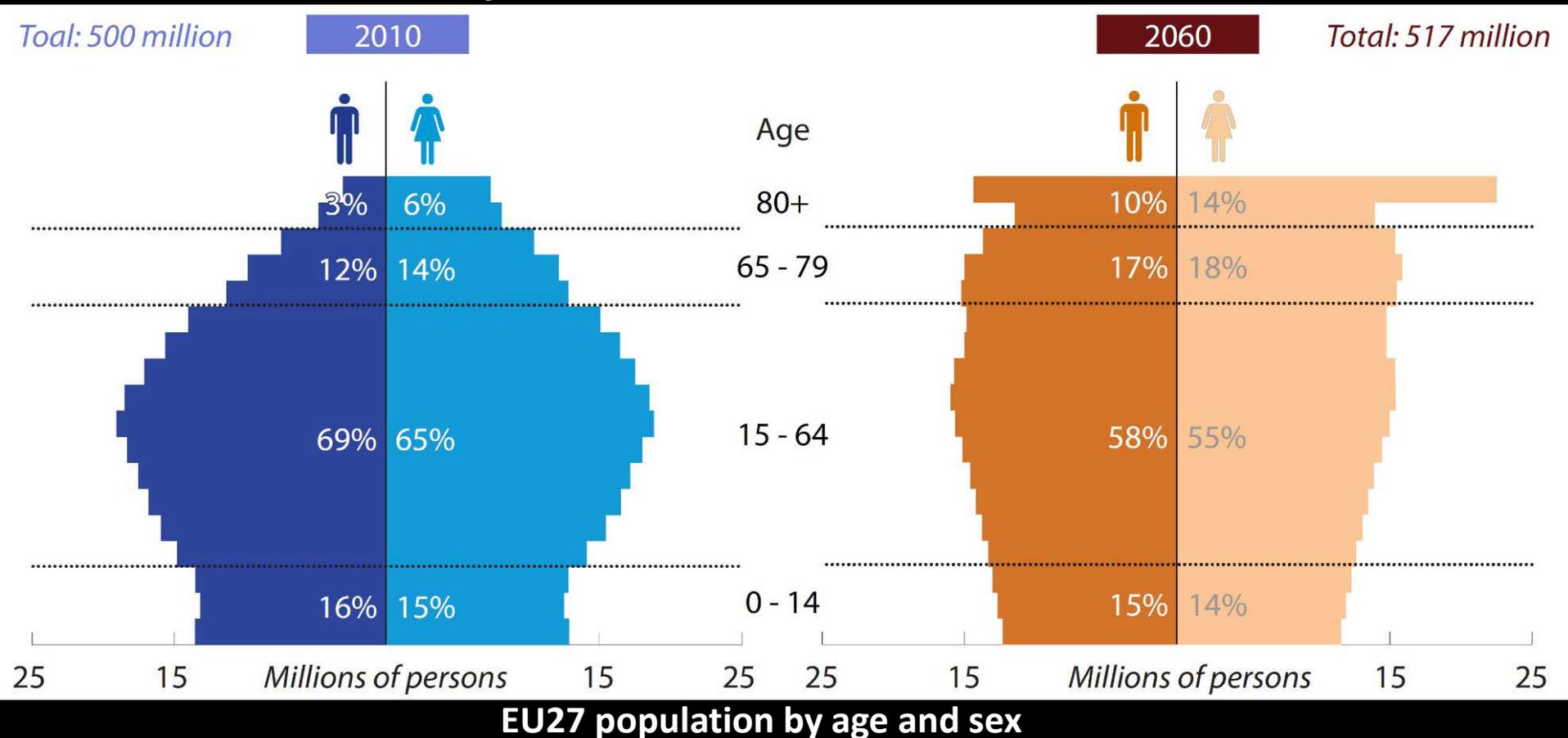
"I feel like I can fly." "I love this place and don't know why I come here so

late." "Again I can feel like a very young woman asking lot of questions". Although seniors who come to Copernicus Science Centre are very pleased about their visit, even though they are only 1.4% of our public. Usually they are thinking about themselves as grandparents focusing on arranging good time for grandchildren. They simply don't know why Copernicus is also a place dedicated to them. We are trying to improve contact with older public in two ways. First, constantly making our offer better according to seniors needs and expectations. Second, we are inviting seniors as mentors, experts and

Why engage seniors?

Longevity Revolution

“ageing is one of the greatest social and economic challenges of the 21st century for European societies. It will affect all EU countries and most policy areas. By 2025 more than 20% of Europeans will be 65 or over, with a particularly rapid increase in numbers of over 80s.”



Longevity Revolution

Resident population 65+ (%) 1960 and 2015 EU28

Rise of the old



Japan population

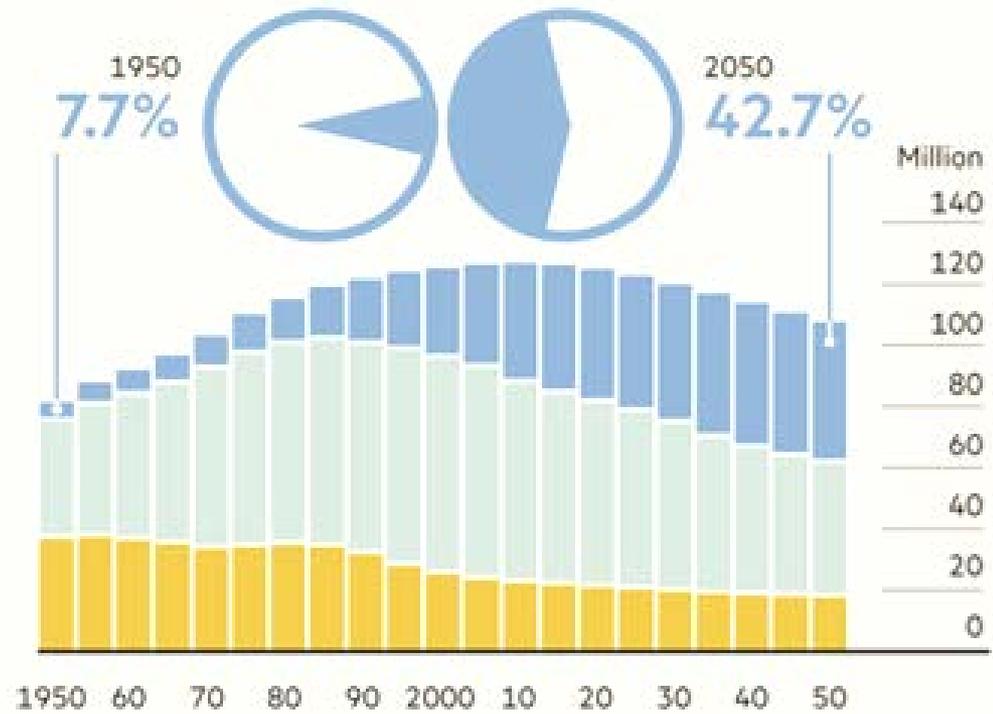
% of Japanese population aged over 60

Key

Over 60

21-59

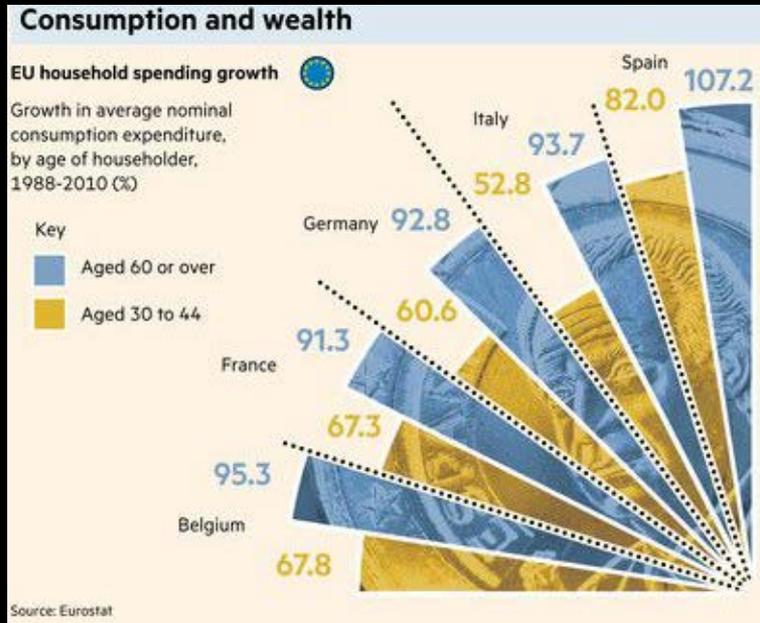
Under 20



Source: UN

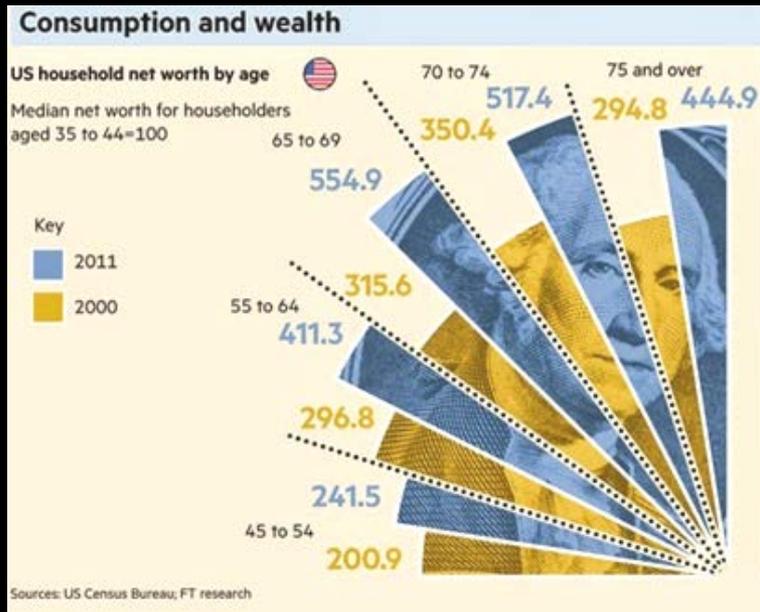
Graph by Financial Times

Silver Economy



End of 2017

70% of disposable income in the USA will be in the hands of people over 60 years



What should be the positioning of SCM's?

Silver Economy

Active and healthy ageing offers also **great opportunities**.

If we are prepared to change our systems for health and social care, we can benefit from those.

Today **Europeans over 65**

have a **spending capacity** of

over €3,000 billion €€€

Ageing in good health allows us to



Travel



Work for more years



Learn new things



Prepare our homes
for **living independently**
for the many years to come

SCM's



Europe has what it takes to **benefit** from these **new opportunities**



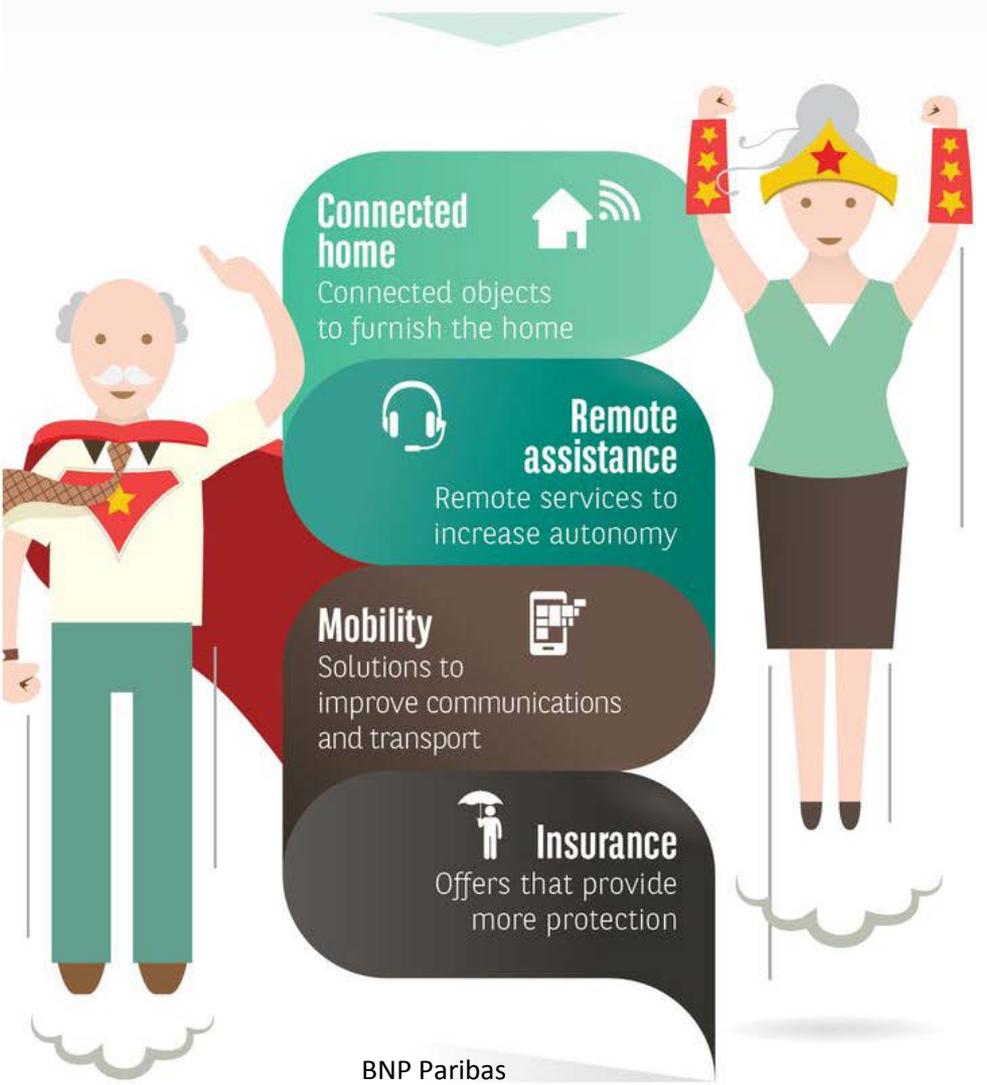
@SilverEcoEU



European
Commission

What are the new "silver products and services" ?

Solutions to promote autonomy,
regular activity and health for seniors!



BNP Paribas

Health Literacy
Active Ageing
Digital Literacy

How to engage seniors?

Active ageing

Hands-on and Minds-on Activities

Health Literacy

Sharing Experience(s)

Life / Skills Experiences

Intergenerational programs

Volunteer

Volunteering

Citizen Science projects



How to engage seniors?



Science Has No Age

Lagos Ciência Viva Science Centre



program in science communication and outreach for senior citizens
(since 2014)



Science Has No Age

Hands-on and Minds-on Activities

Molecular cooking

Photography

Light Painting

Microscopy

Chemical reactions

Botany

Cosmetics

Shells - Bivalves and Gastropods

Bees & Honey

Pin hole

Organic Pigments

Microwave Cooking

Science Talks

Math and Biology of knitting



Science Has No Age

2 Municipalities involved



Lagos

active ageing program

Silves

science outreach



health literacy

vaccines
healthy food
plants and health
others

**cognitive and
neurological stimulation**

Molecular cooking
Photography
Light Painting
Microscopy
Chemical reactions
Botany
(....)



A CIÊNCIA NÃO TEM IDADE



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ciclo
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Silves 



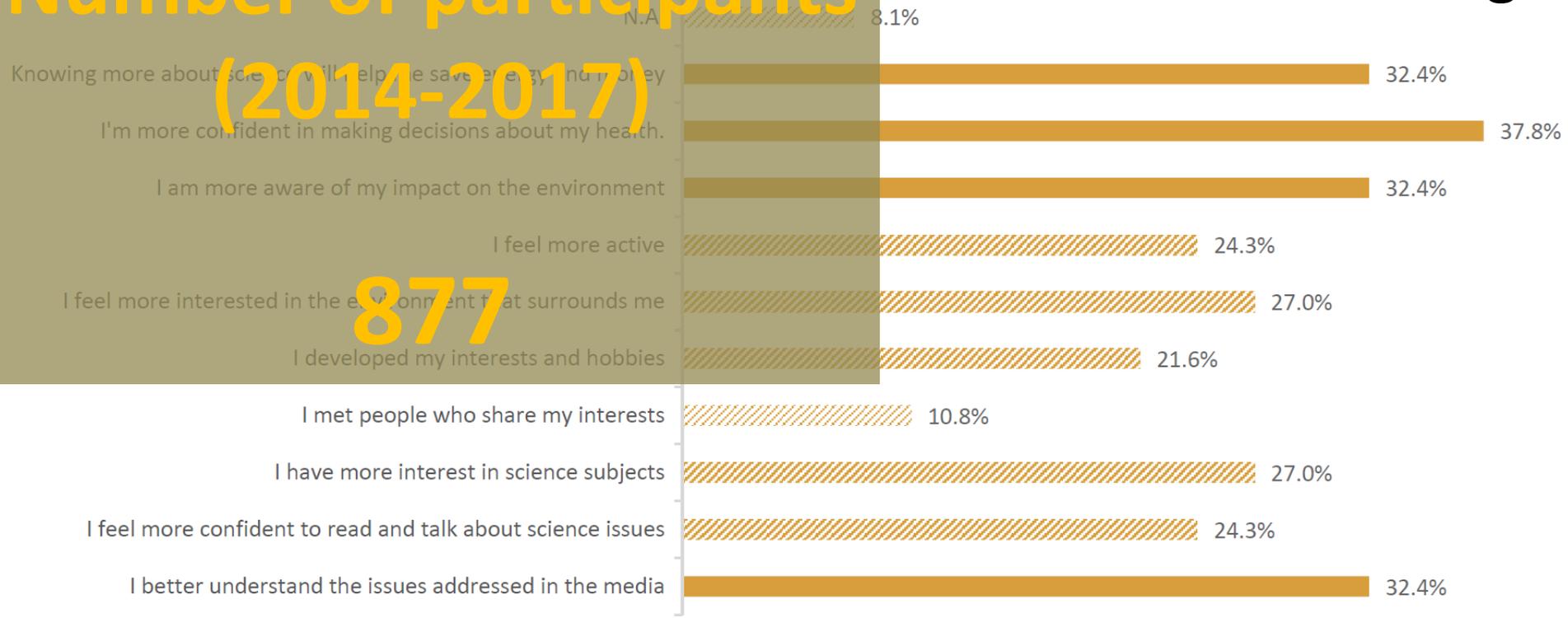

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Number of participants (2014-2017)

877

Science Has No Age



Benefits of participation in activities, identified by participants.



Who are we?



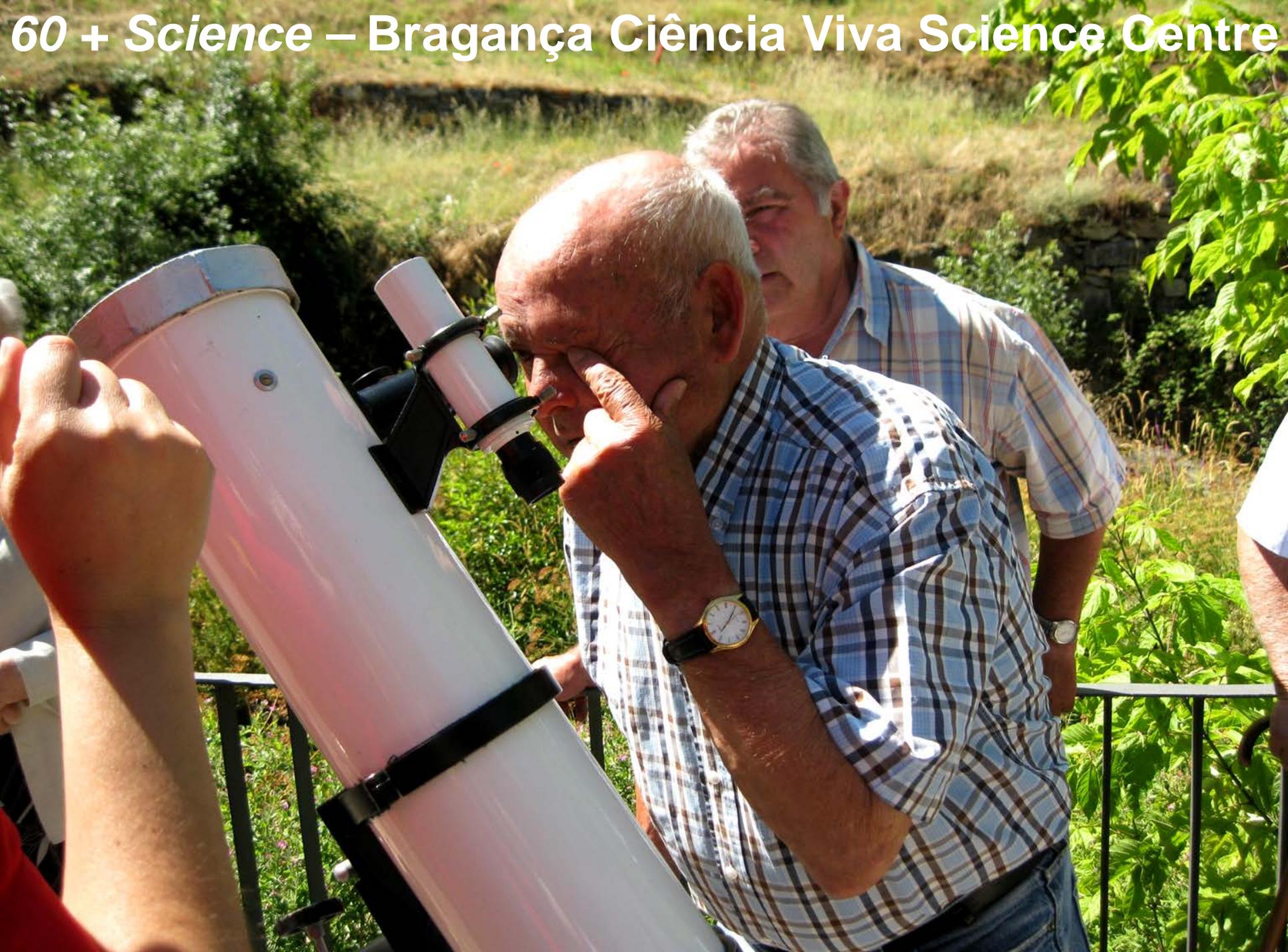
Ciência Viva Science Centres

Ciência Viva Science Centres as a national network (21)

Every Centre offers a **different experience**, integrated in the **heritage, history and tradition** of the region, in touch with the **local community**.



60 + Science – Bragança Ciência Viva Science Centre



Pavilion of Knowledge (Lisbon)
Ciência Viva Science Centre



What Did We Learn?

Program time for peer socialization



What Did We Learn?

Generate **empathy** both with the team, scientist or facilitator



What Did We Learn?

Start from the group's **interests** and **experience/expertise**





What Did We Learn?

Be aware of **physical** and **cognitive specificities** of this group

What Did We Learn?

Motivation management



What Did We Learn?

Most relevant aspects to consider

Motivation management

Generate **empathy** both with the team, scientist or facilitator

Adequate **topic selection**

Start from the group's **interests** and **experience/expertise**

Select carefully the **partners** and **stakeholders** to work with

Be aware of **physical** and **cognitive specificities** of this group

Program time for **peer socialization**

Thank you for your attention!



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N ↑



Percurso **B** 1 manhã 1,5 km



Percurso **C** 1 tarde 32 km



A22 ↑
Faro 90 km
Tavira 114 km

de
uibir



Percurso **A** 1 dia 38 km

Circuito
ência Viva
e Lagos



Passeio
de barco
pela costa

Centro Ciência
Viva de Lagos

Museu de
Escravos

MS37-2

Burgau

da Luz

Rocha em forma
de Elefante

Pegadas de
dinossauro

Praia
Santa

Praia
da Salema

