

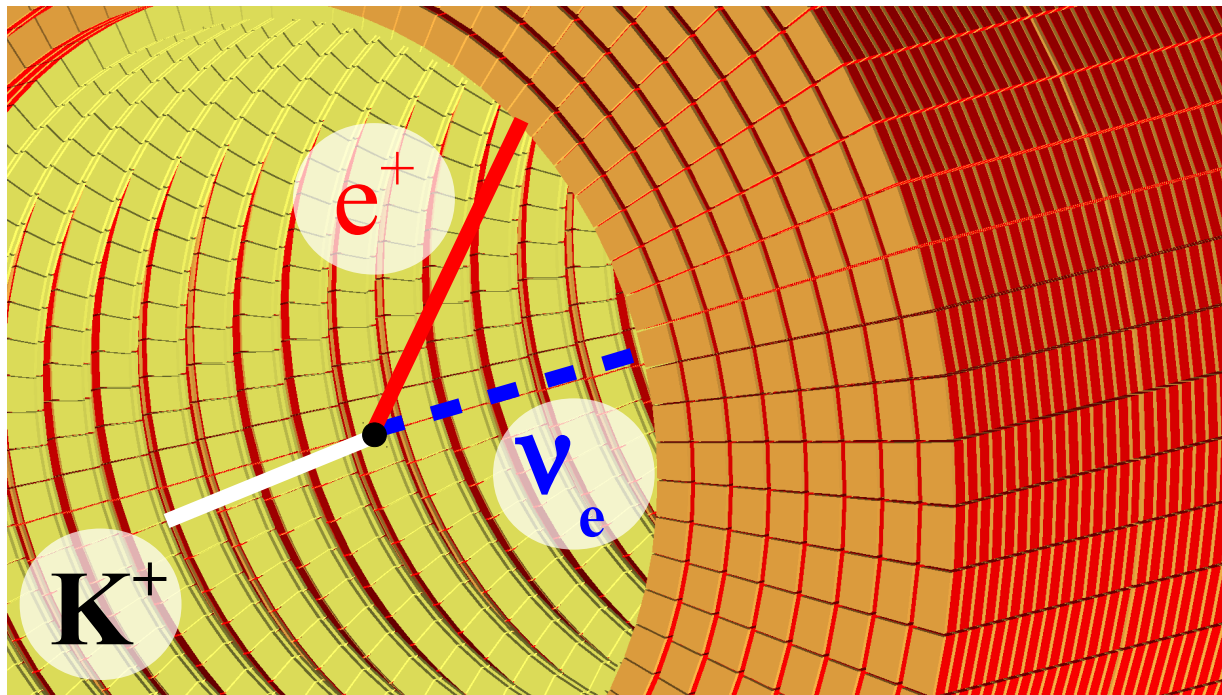
# ENUBET



Enhanced NeUtrino BEams from kaon Tagging  
Some introductory slides

**A. Longhin (INFN-PD)**

**ENUBET kick-off meeting, PD 23 June 2016**



ERC-Consolidator Grant-2015, n° 681647 (PE2)

# ERC grants (from ERC website)

Are you a researcher with an **excellent scientific profile** and with **visionary research projects** in mind that you want to realise in Europe? The European Research Council (ERC) has a funding scheme that will meet your needs.

- **1 researcher; 1 host institution; 1 project;** **Consolidator 2015:**
- 1 selection criterion: **scientific excellence** **585 MEUR, 302 winners**
- No consortia, no networks, no co-financing
- **any field** of research, including social sciences and humanities
- **Independent researchers** from **anywhere in the world**
- Research: in the 28 **EU** member states or **associated countries**
- **Any career stage** (but Consolidator = “*for already independent excellent researchers 7-12 years after PhD) -up to 2 million euro for a period of 5 years*”)
- Host institutions **must provide conditions for the researcher** to direct the research and manage its funding
- The grant is '**portable**' to another host institution, if the grantholder wishes so

# Timeline

- 03/2015: submission of the proposal
- 07/2015: intermediate positive outcome
- 10/2015: interview in Bruxelles
- 12/2015: final outcome
- 03/2016: Grant Agreement signature
- 06/2016: project starts (5 y)



# Preparation phase: choosing the name

- Enhanced NeUtrino BEams from kaon Tagging → **ENUBET**
- The idea behind: “A new bet”, “a bet on e-nu”
- Don't we like it ? We cannot change it! but look... could have been worse! From the notes:
  - POSITrons to RecOrd Neutrinos → **POSITRON**
  - Enhanced NeUtrino BEams from kAon Tagging → **ENUBEAT**
  - Enhanced neUtrino BEams from kAon Tagging → **EUBEAT**
  - Enhanced NeUtrino beams from KAon Tagging → **ENUKAT**
  - Experiment for a KAon TAgged (electron) Neutrino beam → **EKATAN**

# Bruxelles: the pyrotechnic final slide

## ENUBET

erc

### Why ERC

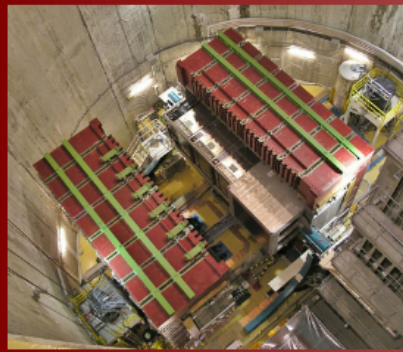
A break-through  
in  $\nu$  physics

$e^+$  monitoring in a decay  
tunnel is the right tool for  
 $\nu_e$  cross-section at  $O(1\%)$

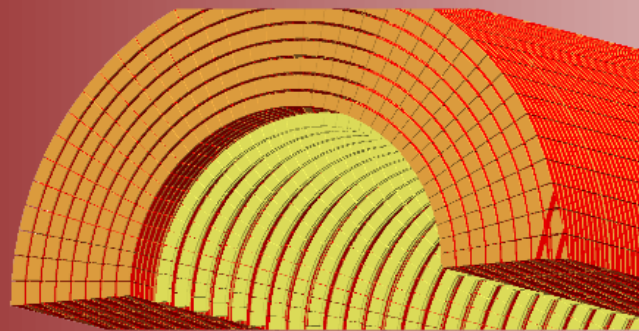
### Why NOW

- **readiness** of detector technology
- **timeliness** with respect to the needs of the field

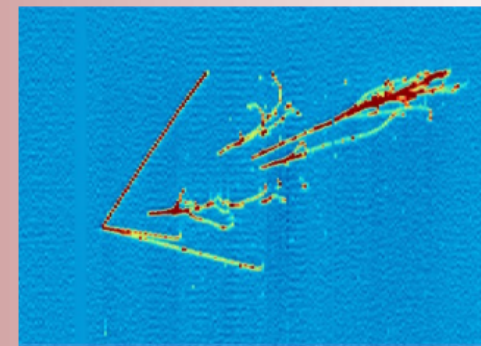
1<sup>st</sup> gen. experiments:  
“the basic picture”



## ENUBET



The precision era



**A ground-breaking opportunity for  $\nu$  science is within reach**



From ERC-2015-COG-APPLICANTS@ec.europa.eu★

Subject ERC Feedback to Applicants of ERC-2015-CoG - Step 2 - PE2 - 681647 - Longhin

To Me <andrea.longhin@Inf.infn.it>★

9/12/2015

Dear Applicant,

I would like to inform you that a new communication has been added to your ERC Feedback to Applicants account at:

<https://webgate.ec.europa.eu/erc/f2a>

Please log in with the following ECAS\* username: andrea.longhin@Inf.infn.it

In case the window 'Where Are You From?' appears, please make sure to select 'External'.

In case you have forgotten your password, you can obtain a new one using the 'Lost your password?' link provided on the login page.

If you encounter difficulties during the login process, please contact ERC-B-SERVICE-DESK@ec.europa.eu

For any further questions, please contact ERC-2015-CoG-Applicants@ec.europa.eu

Best regards,

Ulrike Kainz-Fernandez  
Call Coordinator  
ERC-2015-CoG

Suspence++  
Smells like “no” ?

Promising / ambiguous  
enough...



With overall 2051 applications, the response to this Consolidator Grant call was very high. At the same time, our evaluation panels praise the generally high quality of the proposals they received. This is very encouraging for the ERC and for our effort to address the continuing needs of the scientific community and European society at large while challenging it to stay as ambitious as possible.

The pertinent evaluation panel very much appreciated the opportunity to examine the outstanding proposal you submitted. Its members carefully assessed the individual reviews in joint discussion before reaching their decision.

I am very pleased to inform you that the Panel has recommended your proposal for funding at a sufficiently high position on the rank list to allow actual funding. I offer you my warmest congratulations for this success.

I am confident that this grant will help you to develop your research at the highest possible level, and to achieve ground-breaking results in the true spirit of the ERC. I would also like to invite you to join in our efforts to make the ERC widely known and to ask you for your support. In this context, please note that the ERC may come back to ask for your contribution as a potential reviewer. Your acceptance would be greatly valued and appreciated.

generic  
suspence

This success is indebted to the existence of **a strong/credible team** and a prestigious **host institution** and the achieved **intermediate results** (SCENTT)!

We/this idea has been given 2MEUR, this means a lot of **trust** and a big **responsibility** (ah and not only for the PI...)!



**Let's show what we can do with these means !**



**... and with this style !**



**“Motivational” slides ends...  
Let ENUBET begin!**



# The agenda of today



14:00	<b>Welcome from the Director</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>MEZZETTO, Mauro</i> 14:00 - 14:10
	<b>Introduction to the meeting</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>LONGHIN, Andrea</i> 14:10 - 14:15
	<b>Neutrino cross sections in the GeV region</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>MELONI, Davide</i> 14:15 - 14:40
	<b>Water Cherenkov for neutrino experiments</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>CATANESI, Maria Gabriella</i> 14:40 - 15:10
15:00	<b>The ESSnUSB project</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>EKELOF, Tord</i> 15:10 - 15:40
	<b>Coffe Break</b> <i>Brunchy bar, Brunchy bar</i>	15:40 - 16:05
16:00	<b>Group picture</b> <i>via Marzolo 8, Physics department entrance</i>	16:05 - 16:10
	<b>Overview of the ENUBET mission in the context of neutrino physics</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>LONGHIN, Andrea</i> 16:10 - 16:55
17:00	<b>ENUBET working packages and milestones</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>TERRANOVA, Francesco</i> 16:55 - 17:15
	<b>Expression of Interest for the SPSC</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>TERRANOVA, Francesco et al.</i> 17:15 - 17:35
	<b>ENUBET: setting up the tools</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>LONGHIN, Andrea</i> 17:35 - 17:55
18:00	<b>Best practices for EU projects and administrative aspects</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	<i>LONGHIN, Andrea</i> 17:55 - 18:15
	<b>Discussion</b> <i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	18:15 - 18:45

Brunchy bar,  
Via G. Jappelli, 3  
5' walk from here

# The agenda of tomorrow: SCENTT



09:00	<b>Outcome of the tests with cosmic rays of the two test modules</b>	<i>BERRA, Alessandro</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	09:00 - 09:20
	<b>Production of the steel tiles</b>	<i>TERRANOVA, Francesco</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	09:20 - 09:40
	<b>Cutting, polishing and drilling of the scintillator tiles and Y11 fibers</b>	<i>SIRRI, Gabriele et al.</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	09:40 - 10:00
10:00	<b>Assembly of the modules for the testbeam</b>	<i>MARGOTTI, Anselmo et al.</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	10:00 - 10:20
	<b>INSULAB testbeam: schedule, logistics, installation</b>	<i>BERRA, Alessandro et al.</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	10:20 - 10:40
	<b>Cradle</b>	<i>LONGHIN, Andrea</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	10:40 - 11:00
11:00	<b>SiPM for the winter testbeam</b>	<i>BERRA, Alessandro et al.</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	11:00 - 11:20
	<b>Coffe break</b>	
	<i>Brunchy bar, Brunchy bar</i>	11:20 - 11:40
	<b>Status of the electronics</b>	<i>VALLAZZA, Erik Silvio</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	11:40 - 12:00
12:00	<b>Procurement of the BCF92 fibers and overall schedule for the winter testbeam</b>	<i>TERRANOVA, Francesco</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	12:00 - 12:20
	<b>Startup of the activities for the photon veto</b>	<i>SIRRI, Gabriele et al.</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	12:20 - 12:40
	<b>Conferences and papers</b>	<i>LONGHIN, Andrea et al.</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	12:40 - 13:00
13:00	<b>Status of the simulation</b>	<i>MEREGAGLIA, Anselmo</i>
	<i>Aula Voci (piano terra), Padova Dipartimento di Fisica G. Galilei</i>	13:00 - 13:20
	<b>INFN requests for 2017 [Outcome of the meeting with the chairmen of Comm.II and V and requests for Comm. II]</b>	<i>LONGHIN, Andrea et al.</i>

# Social dinner

Ristorante Isola di Caprera

Via Marsilio da Padova 11-15

