



# THE PICOSEC MC-NET PROJECT



## PicoSEC : Recruitment

Etiennette Auffray,  
Network Coordinator  
CERN PH-CMX





# PicoSEC : For young researchers



**22 Job opportunities : 18 Early stage researchers, 4 Experienced researchers**

Fellow type & number	Individual Research Project (IRP) Title	Link with WPs	Host Institution	Fellow months
ESR1	Understanding and improving light production, light transport, light collection in scintillators;	1	CERN	36
ESR2	Evaluation of scintillator timing performance with different SiPM types (analog and digital)	2	CERN	36
ESR3	Development and optimization of a matrix assembly for PET detector: crystal coating and assembly, coupling of optical component and photodetectors	4	CERN	36
ER1	Concept, realization and optimization of a crystal fiber matrix prototype for calorimetry in HEP and evaluation of its performance in test beam	4	CERN	24
ESR4	Design of time-to-digital converter (TDC) arrays; readout of individual single-photon detecting pixels based on SPADs;	2	TU-Delft	36
ESR5	Design of single-photon detector arrays (SPADs) in CMOS; event-driven column readout or on-chip data reorganization;	2	TU-Delft	36
ESR6	Development of front-end electronics for fast SiPM readout	3	DESY	36
ESR7	Use of SiPMs for fast timing in highly granular calorimeters;	4	DESY	36
ESR8	Micro-pulling-down growth of shaped single crystals, quality and efficiency improvement of this technique.	1	Fibercryst	36





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ESR10	Design, construction and test of a TOF-PET prototype	4	UHEI	36
ER2	Design & characterization of ASIC for fast SiPM readout	3	UHEI	24
ER3	Research on & test of combined Scint./SiPM systems	4	UHEI	24
ESR11	Fabrication of optical coupling microstructures via laser direct writing	1	Kloé	36
ER4	Test and assembly of optical coupling microstructures realised by laser direct writing	1	Kloé	24
ESR12	Design and characterization of TOF ASIC	3	LIP	36
ESR13	Development of high-performance DAQ for PET	3	LIP	36
ESR14	Characterization and optimization of scintillating crystals for applications to medical imaging and future detectors for high energy physics.	1	UNIMIB	36
ESR15	Characterization of several types of SiPM	2	UNIMIB	36
ESR16	Advanced tracking and navigation for endoscopy	5	TUM	36
ESR17	Design of a SiPM for Time of Flight-PET	2	ST-I	36
ESR18	Image Reconstruction using Tracked Flexible Detectors	5	SurgicEye	36



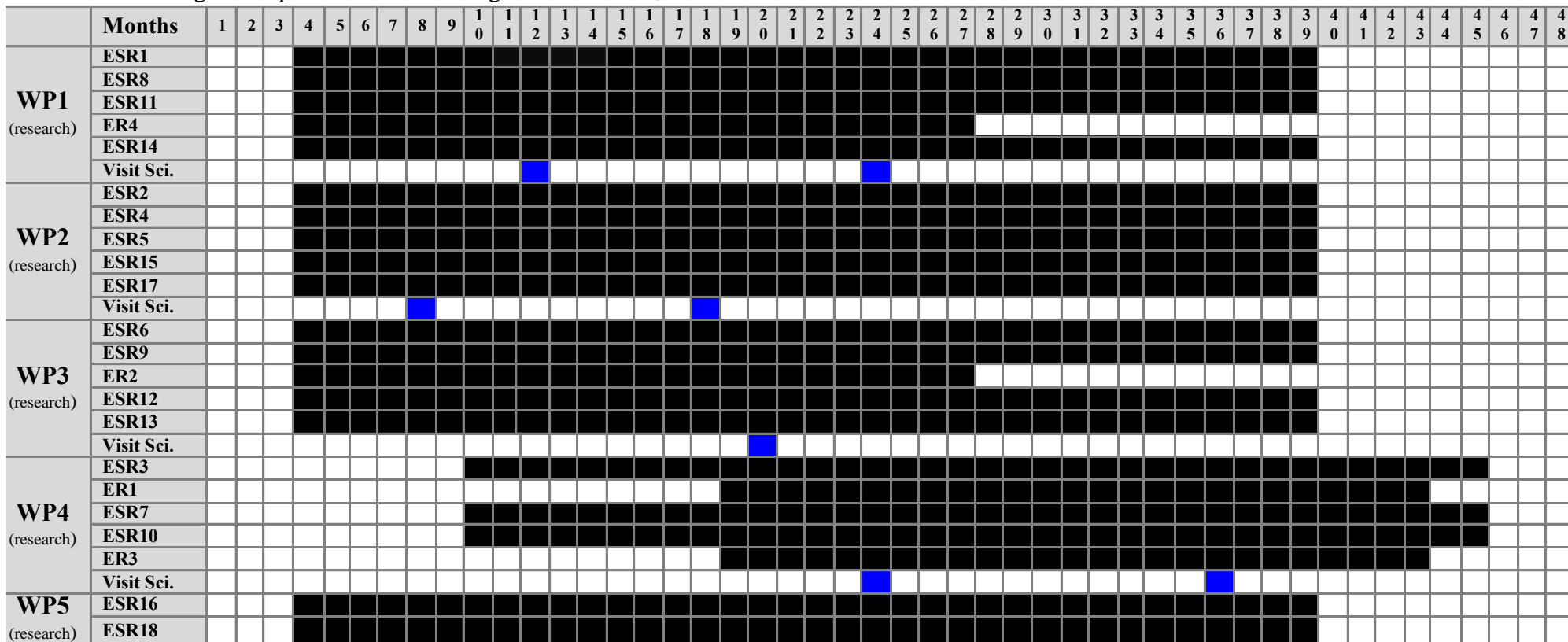


# Initial schedule for recruitment



17 ESRs and 2 ERs starting beginning of the project initially M4 (March)

GANTT chart—organized per WP and reflecting ESRs and ERs, recruitments



All ESRs have to be recruited before end of October 2012 (contract of 36 months)





# Status of Recruitment



- All the applications are centralized in the ERT system at CERN.
- All posts have been published on the PicoSEC website, CERN's ERT pages, Euroaxess and several other networks.
- **For the moment: <5 applications/per post; → Need more advertising!**
- Deadline extended to January 31.
- Seamus will verify the eligibility of each candidate.
- Pre-selection of students in February in each institute.
- Interviews during February /March
  - **Each institute will have to report on the recruitment procedure.**
- Start work in April/May
- **How do we want to proceed for the pre-selection ?**
  - Each institute selects the candidate on its own.
  - Setting up a small group that oversees the job applications and makes appropriate recommendations.





# Recruitment Matters (1/2)



- Advertise as widely as possible -> done but the number of applications so far could be better...

ESR1	CERN	5	ESR12	LIP	5
ESR2	CERN	6	ESR13	LIP	3
ESR3	CERN	4	ESR14	Milano	2
ESR4	Delft	4	ESR15	Milano	2
ESR5	Delft	3	ESR16	Munich	4
ESR6	DESY	1	ESR17	STMicro	20
ESR7	DESY	5	ESR18	Surgiceye	4
ESR8	Fibercryst	8	<i>ER1</i>	<i>CERN</i>	<i>later</i>
ESR9	UHEI	3	<i>ER2</i>	<i>UHEI</i>	2
ESR10	UHEI	4	<i>ER3</i>	<i>UHEI</i>	<i>later</i>
ESR11	Kloé	3	<i>ER4</i>	<i>Kloé</i>	3







# Recruitment Reminder



## Mobility rules for researchers :

- Researchers can be of any nationality.
- They must comply with the rule of mobility.
- Researchers are normally required to engage in trans-national mobility (i.e. move from one country to another) when taking up their appointment.
- A general rule applying to the appointment of researchers in a network is:
  - “At the time of recruitment by the host organization, **researchers must not have resided or carried out their main activity (work, studies, etc) in the country of their host organization for more than 12 months in the 3 years immediately prior to the reference date.** Short stays, such as holidays and/or compulsory national service, are not taken into account. ”





# Career plan development



- Each recruited student must define a career plan development with his supervisor: to be done in the 1<sup>st</sup> month of contract :

- Name of fellow:
- Department:
- Name of Supervisor:
- Date:
  
- **BRIEF OVERVIEW OF RESEARCH PROJECT AND MAJOR ACCOMPLISHMENTS EXPECTED (half page should be sufficient):**
- **LONG-TERM CAREER OBJECTIVES (over 5 years):**
- Goals:
- What further research activity or other training is needed to attain these goals?
- **SHORT-TERM OBJECTIVES (1-2 years):**
- Research results
  - Anticipated publications:
  - Anticipated conference, workshop attendance, courses, and /or seminar presentations:
- Research Skills and techniques:
  - Training in specific new areas, or technical expertise etc:
- Research management:
  - Fellowship or other funding applications planned (indicate name of award if known; include fellowships with entire funding periods, grants written/applied for/received, professional society presentation awards or travel awards, etc.)
- Communication skills:
- Other professional training (course work, teaching activity):
- Anticipated networking opportunities
- Other activities (community, etc) with professional relevance:
- Date & Signature of fellow: \_\_\_\_\_ Date & Signature of supervisor







# Student welcome events



- Propose to have a Student Welcome event during the first Network training in Lyon on scintillators in mid-June 2012 (two-and-a-half days)

