



European  
Research  
Council

# Low-probability, large fluctuations of the noise in detectors of gravitational waves

Nickname of the project: RareNoise

Principal Investigator: Livia Conti – INFN

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[www.rarenoise.inl.infn.it](http://www.rarenoise.inl.infn.it)



# Il mio intervento oggi

- la mia esperienza con Ideas/ERC/Starting Independent Researcher Grant:
  - preparazione del proposal
  - colloquio orale
  - referaggio
  - sigla del Grant Agreement
- la gestione del progetto:
  - il Consortium Agreement
  - gestione del progetto nell'INFN

In generale ritengo sia molto utile un incontro di questo tipo:

ritengo che in diverse occasioni sarebbe stato di aiuto poter fare riferimento a esperienze passate.

# Call IDEAS junior 2007

un individuo (Principal Investigator: PI) propone sè stesso, un'idea di ricerca di frontiera e un gruppo a ERC, avendo il pieno supporto di una Host Institution (HI).

	Fase 1	Fase 2	punteggio
scadenza	25.4.07	17.09.07	
CV del PI + autovalutazione	max 3 pagine	max 4 pagine	0 – 5
Proposal	max 4 pagine	max 10 pagine	0 – 5
Risorse +Host Institution	max 1 pagina	max 2	si / no
totale	max 8 pagine	max 16 pagine	0 - 10
# referee	3	3	

'fase 3' in novembre 2007

= colloquio di fronte al panel di esperti di riferimento  
= breve presentazione del progetto da parte del PI  
+ domande/risposte

# RareNoise: review process

The peer review panel assigned to the project (different from our suggestion) was:

**Panel PE7 - Universe science:** astro-physics/chemistry/biology/geology; solar system; stellar, galactic and extragalactic astronomy, cosmology; space science, instrumentation

After the oral interview in Brussels, I received the reports from the panel and referees:  
very clear, precise and acute comments.

We received confirmation of the ERC Grant on 12nd December 2007

After more than 6 months the Grant Agreement was signed:  
the official start of the project is 1<sup>st</sup> July 2008

RareNoise is a 5year long project funded by an ERC Starting Independent Research Grant

# The Idea

Good ideas are rare: be jealous of your idea!

I had to defend my idea against the opinion of other scientists arguing it is a nonsense or simply wrong.

→ Do not overtrust other scientists: do believe in yourself!

But: I was not sure of the goodness of the idea until I discussed with an open minded, honest colleague who did take his time to study with me.

-> find someone to discuss with.

# The administrative papers

Take your time to check carefully all administrative papers to see if they comply with the template:

it is not as obvious as one might expect

E' stato per me molto utile in questo ambito l'aiuto dal financial officer del progetto (R.Battistella) che ha mediato l'interazione con l'amministrazione centrale dell'inf:

ottimo è avere un supporto amministrativo valido e vicino, con cui interagire in tempi ristretti

# The abstract

This is the only part of the proposal I received indications for by my Host Institution.

I was advised to write it down carefully:

do not convey the idea (the abstract is public) but

do give the impression you really have something new to say.

I did follow these instructions.

# The CV

As usual, my problem was to find a balance between boldness and shyness:

after many years with fixed time contracts (precariato) I decided to tell my truth, supported by evidence.

This was not my standard CV:

I put focus on my originality in solving problems or asking new questions. I paid little attention to politics, or science management (which I am not proud of, actually).

I wrote down several times the self-evaluation before finding it satisfactory:

do not write the self-evaluation as a summary of the CV.

Put in evidence your personal attitudes, motivations and qualities.

# The proposal

The ERC writes down very detailed instructions on how to prepare the proposal.

I chose to follow their indications: I believe that they put effort in those guides that are a distillation of past experiences of both reviewers and applicants of different grant schemes.

I did follow all guidelines, including the structure (order of appearance of different items) and content of the CV, of the research project and environment.  
Thus I ended up with a very clean and well ordered proposal.

My proposal involves experimental, theoretical and numerical work.

I planned very carefully the research development: I found useful to refer to a Gantt chart .  
Items in the Gantt chart ended up being the key intermediate goals of the project.

The experimental work was divided in 3 phases of increasing complexity and difficulty: this was appreciated by the referees.

# HI and team members

At the time of the first submission to ERC, there was a diffuse belief that having more than one HI would be harmful:

besides my Host Institution, I have 2 more HIs (CNR, Politecnico di Torino) and was never objected because of this.

In the proposal I did not discuss why I needed 2 more institutions. Simply I presented my 2 team members and showed they are crucial to develop critical parts that I am not an expert of, as clear from my CV. These are the people I could attract to the project and they happen to work in different institutions. I made clear that thanks to one of the team members the project has access to a specific technology.

My motivation was to perform the research within the planned 5 years and mastering all necessary competences.

# Financial aspects

In my proposal the financial part covered just half a page.

There was not a discussion on the budget at any stage of evaluation:  
I was just told the final amount I was granted (a 20% cut with respect to my indication),  
with no justifications or reasoning.

I was told by my HI to avoid Equipment ('inventariabile') as much as possible

## **Personnel:**

A relevant fraction of my budget is for hiring personnel (about 50%).

Take your time to make clear all options for hiring people in your HI.

Consider also that this is a very delicate issue in Italy.

Consider your chances to attract foreign people.

# Oral interview

Speaking in front of some 15-20 leading scientists who do listen and try to understand who I am was a rewarding experience.

After my presentation (with no financial details) there followed question time: fast question/answer dynamics, about 1 question per panel member (so quite a lot of questions).

I think they just want you to show yourself so I have no tricks to tell you.

# Final remarks on applying to ERC

As a general remark: do take your time to write down the proposal.

In the end I spent a few months on the project (this included time for studying): it proved the best investment I have ever made, repaid with 1M€.

I enjoyed writing the proposal: I had the opportunity to study something new and different, which did not happen so often previously.

Even in case of no funding, I would consider positively the ERC experience.

Be prepared to what follows: it is even tougher!

# Cosa viene dopo

Nel mio caso (3 istituzioni partecipanti) si è ritenuto necessario stipulare un Consortium Agreement tra le istituzioni coinvolte.

Non mi è chiaro se fosse obbligatorio e senz'altro finisce col richiedere una maggior mole di carte ma tutto sommato ritengo sia stata una cosa utile in quanto:

- forza a una maggiore autodisciplina e chiarezza
- espone il progetto all'attenzione di più scienziati
- tutela i vari enti in caso di 'pazzia' di qualcuno

Per rendere positivo il bilancio del Consorzio ritengo sia fondamentale la presenza di un financial officer collaborativo

Lo stesso financial officer poi interviene nella stipula del Grant Agreement quindi:  
siate sicuri di trovarne uno valido!

# Gestione del progetto

L'INFN (e non ERC) richiede al PI il 100% del suo FTE sul progetto: automaticamente si è fuori da qualsiasi esperimento standard dell'INFN (cioè fuori da esperimenti delle varie commissioni, progetti speciali...)

Secondo me l'INFN ancora non ha deciso come porsi di fronte ai progetti ERC.

In particolare non è chiaro con quale impegno voglia:

- supportare la ricerca finanziata da ERC, che rischia di essere anche molto fuori dalle linee di ricerca delle commissioni scientifiche nazionali
- facilitare la formazione di un gruppo radicato nell'istituzione e che affronta la tematica oggetto del primo finanziamento.

# ultime considerazioni

Tutto sommato la mia esperienza con ERC è totalmente positiva.

La mia esperienza con l'INFN riflette sicuramente l'impreparazione dell'ente legata certo alla novità di ERC.

I ended up being a diverse, a 'case study':  
my research is not in the mainstream (neither in the least stream) of my HI and  
my funding has special management, in some respect an advantage.

You always pay for being diverse but biodiversity is an enrichment