

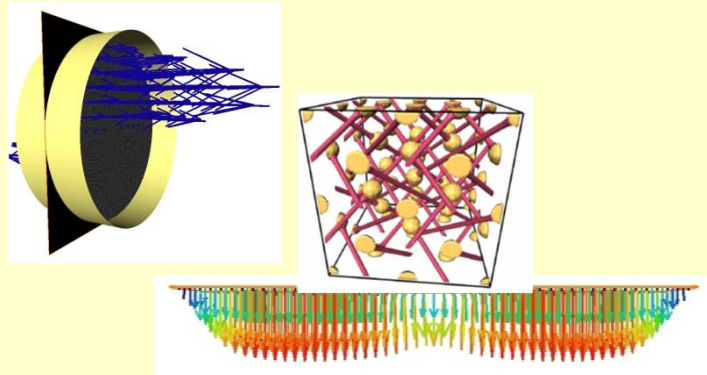
Univerza v Ljubljani  
Fakulteta za *matematiko in fiziko*



# Izkušnje z Marie Curie štipendijo (IEF) in Marie Curie Integracijskim (CIG) projektom

**Miha Ravnik**  
<http://miha.ravnik.si>

**Fakulteta za matematiko in fiziko, UL**



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## Post-doc: možnosti (naravoslovje)

1) Projekt gostitelja

2) SLO projekt oz podpora domače raziskovalne skupine

3) Odprto učiteljsko oz raziskovalno mesto na tuji inštituciji

4) Lasten projekt/štipendija/financiranje

Prednosti lastnega vira financiranja: neodvisnost, sam izbereš inštitucijo (državo), sam izbereš raziskovalno temo, vpetost v aplikativne raziskave, izbira učiteljske obremenitve, pomemben dokaz akademskega razvoja, tipično višja plača.

Možnosti Evropa:

- Sheme posameznih držav(štipendije, razpisi), npr. Nemčija (Humboldtova fundacija, DFG), Velika Britanija (EPSRC).
- EU financiranje: Horizon2020- Marie Curie Actions (Individual Fellowships IF - European, Global)

*Programme dedicated to stimulating researchers' career development*

*[http://ec.europa.eu/research/mariecurieactions/about-msca/actions/if/index\\_en.htm](http://ec.europa.eu/research/mariecurieactions/about-msca/actions/if/index_en.htm)*

## Zakaj Marie Curie IEF (European IF)

- 1) Gostiteljska inštitucija (host institution) v katerikoli EU državi
- 2) Raziskovalni projekt na takorekoč poljubno temo
- 3) Poleg samih raziskav je enako pomemben tudi razvoj veščin štipendista (konference, potovanje, oprema, učenje, metode, etika, jezik)
- 4) Svetovno prepoznana referenca in priznanje

Ali je to zame? Ali sem konkurenčen?

*„This action is to support the career development of experienced researchers at different stages of their careers, and seeks to enhance their individual competence diversification in terms of skill acquisition at multi- or interdisciplinary level and/or by undertaking intersectoral experiences.“*

Trije ključni momenti:

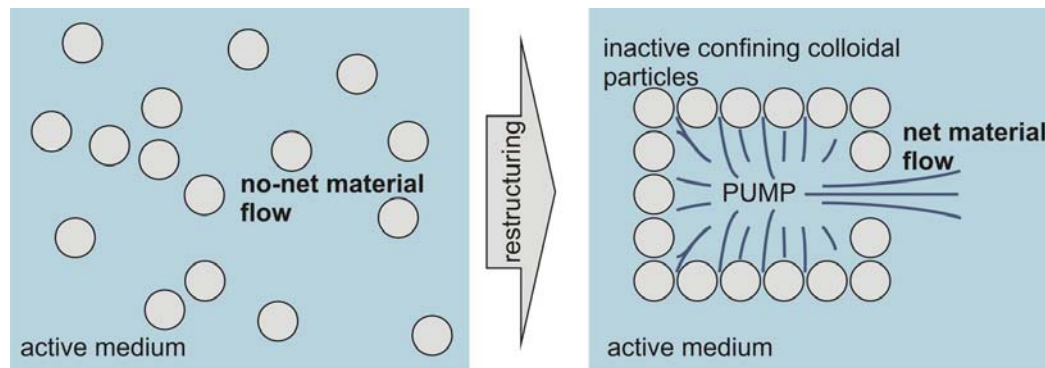
- (i) Raziskovalni projekt
- (ii) Kandidat
- (iii) Gostitelj

# Kako pridobite IEF: Kvaliteta raziskovalnega projekta

## Projekt mora biti:

- Znanstveno odličen (scientific excellence)
- Izvedljiv
- Vpet v nacionalno, EU in svetovno okolje (timeliness)
- Uporabljati/razviti zanimive metode
- Imeti mora tudi nekaj aplikativnega momenta

## ACTOIDS: Cilj razviti nov material – aktivne tekočokristalne koloide (Active Liquid Crystal Colloids)



Ustvarjanje tokovnih vzorcev in nadzor aktivnosti z urejanjem mikroskopskih delcev

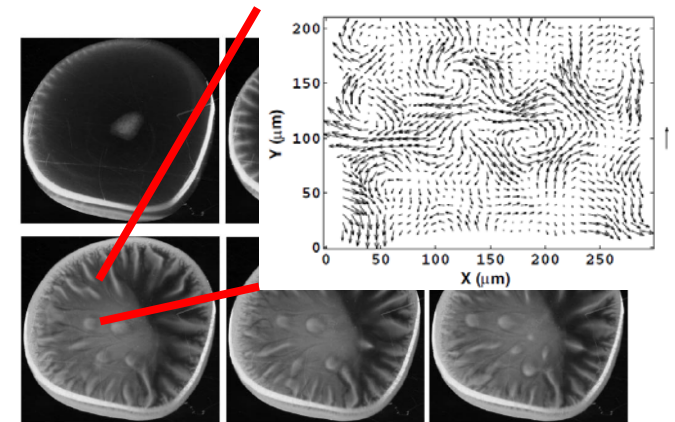


FIG. 1. Bioconvection in a sessile drop of diameter 1 cm. Top: images 5 min apart show the traveling-wave bio-Boycott convection that appears first at the drop edge. Bottom: images 2 min apart show self-concentration seen from above, beginning as vertical plumes which migrate outward.

## Kako pridobite IEF: Kvaliteta kandidata

Izkazati morate, da potrebujete prav to štipendijo, da boste dokončno razvili svoj (že odličen raziskovalni) potencial.

Reference: odmevni znanstveni članki, citati, predavanja, patenti, ....

### ACTOIDS (ob času prijave):

*He has published (in <5 years of research) as the first author or the co-author 14 scientific papers (4 PRL, 1 Science, 2 Soft Matter, 1 APL, 4 PRE, 1 EPJE, 1 JAP), with additionally 1 Nature Photonics, 1 Soft Mater, 1 Farad. Discuss. and 1 Liq. Cryst. accepted.*

*He has in total ~140 citations in WEB of Science and h-index of 6.*

1. [PRL 2006] P. Kosyrev, M. Ravnik, S. Zumer Phys. Rev. Lett. **96**, 048301 (2006).
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4. [PRL 2007] M. Ravnik, M. Skarabot, S. Zumer, U. Tkalec, I. Poberaj, D. Babic, N. Osterman, I. Musevic, Phys. Rev. Lett. **99**, 247801 (2007).
5. [PRE 2007] M. Skarabot, M. Ravnik, S. Zumer, U. Tkalec, I. Poberaj, D. Babic, N. Osterman, I. Musevic, Phys. Rev. E **76**, 051406 (2007).
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12. [SOFTMATTER 2009a] M. Ravnik and S. Zumer, Soft Matter **5**, 269 (2009).
13. [JAP 2009] M. K. McCamley, M. Ravnik, A. W. Arntstein, S. M. Opal, S. Zumer, G. P. Crawford, J. Appl. Phys. **105**, 123504 (2009).
14. [SOFTMATTER 2009b] M. Conradi, M. Ravnik, M. Bele, M. Zorko, S. Zumer, I. Musevic, Soft Matter, DOI: 10.1039/b905631a (2009).
15. [FARAD DISCUSS 2009] M. Ravnik, G. P. Alexander, J. M. Yeomans, S. Zumer, Mesoscopic modelling of colloids in chiral nematics, Farad. Discuss., accepted.
16. [NATURE PHOTONICS 2009] M. Humar, M. Ravnik, S. Pajk, I. Musevic, Electrically Tunable Liquid Crystal Optical Microresonators, Nat. Photonics, accepted.
17. [LIQ CRYST 2009] M. Ravnik and S. Zumer, Landau-de Gennes modeling of nematic liquid crystal colloids, Liq. Cryst., accepted.
18. [SOFTMATTER 2009c] M. Ravnik and S. Zumer, Nematic braids: 2D entangled nematic liquid crystal colloids, Soft Matter, accepted.

## Kako pridobite IEF: Kvaliteta gostiteljske skupnine

Gostiteljska skupina mora izkazati, da vam res prav ona lahko omogoči izvedbo raziskovalnega projekta; pomembno pa da vas ob tem tudi lahko izuči veččin.

Priznane inštitucije toliko lažje.

### ACTOIDS:

*Univerza v Oxfordu, Rudolf Peierls Centre for Theoretical Physics*

*Prof. Julia M. Yeomans FRS; (~200 znan. člankov, 5000 citatov, h-indeks~40)*

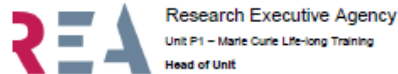
*Skupina ~6-10 (2-4 post-doci, ostalo PhD študenti)*



## Kako pridobite IEF: Nekaj praktičnih napotkov

- Preverite „eligibility“
- Preberite razpisno gradivo – naučite se kaj je pomembno in spoznate „EU frazologijo“
- Dobro napišite Part B – dober znanstveni jezik, jasnost, tudi oblika in strukturiranost je pomembna!
- Letters-of-support: lahko so koristna, če so res znana imena.
- Pisanje vzame vsaj 14dni (dele more napisati tudi gostitelj); roki so tipično avgusta (septembra)
- Vprašajte se ali je to kar obljublimate res izvedljivo.
- Kako je delo relevantno in v skladu z EU smernicami in strategijo Horizon 2020?

# Ocenjevanje 1:



Brussels, 25/11/2009  
REA-PI/KGB/GS/LKJ D(2009) 6356

Prof. Julia Yeomans  
University Offices, Wellington  
Square  
OXFORD OX1 2JD  
UK

Subject: Initial information on the outcome of the evaluation of proposals:

Ref: *FP7-PEOPLE-2009-IEF - 253995 - ACTOIDS*

Dear Prof. Yeomans,

The REA services with the help of independent experts have recently evaluated the proposals submitted in the context of the above-mentioned call, including your proposal entitled "Active liquid crystal colloids".

Your proposal was evaluated against the criteria published for the call. The attached Evaluation Summary Report records the views of the expert evaluators and the scores that your proposal achieved.

Based on this evaluation by independent experts, the Commission will rank in priority order those proposals that passed all the evaluation thresholds, and will then take a decision on the lists of proposals for which negotiations of the grant agreement can proceed. This letter does not prejudice the outcome of this process.

For information, in  
around 575 projects

This letter cannot be

You will be informed in due course by the REA of the outcome of the Commission's formal decision on your project.

I would be grateful if you could inform the fellow researcher Dr. Miha Ravnik in this proposal of the content of this letter. Finally, if you wish to use the redress procedure (see box below), any such request must be received by 25/12/2009.

Yours sincerely,

Klaus-Guenther BARTHEL

#### About the redress procedure

The redress procedure for submission and evaluation<sup>1</sup> is concerned with how your proposal was handled in the evaluation and eligibility-checking process. It is **not** an automatic re-evaluation. Please note that new information or clarifications that should have been in the proposal will not be taken into consideration. Furthermore, the judgement of appropriately qualified groups of experts will not be called into question.

Any request for redress must be submitted by the co-ordinator before the deadline mentioned above, via the following website [http://cordis.europa.eu/fp7/redress\\_en.html](http://cordis.europa.eu/fp7/redress_en.html). More information on redress can be found at the same site.

Enclosure: Evaluation Summary Report

For information, in this particular call it is estimated that funds will be available to support around 575 projects out of the 1857 that have passed all evaluation thresholds.

<sup>1</sup> Rules for the submission of proposals and the related evaluation, selection and award procedures, 21.8.2008 (available through CORDIS)



## Delo kot Marie Curie štipendist

- Štipendija začne z maksimalno 1letnim odlogom (najprej tipično marca, pogodba šele julija)
- Večje univerze imajo že preverjen in izdelan postopek vodenja in upravljanja MC štipendij (npr. Oxford letno ~25 MC IEF štipendij )
- Raziskovalno delo na projektu
- Primerno omenjanje MC vira financiranja na člankih in predavanjih
- 3 poročila
- Marie Curie Alumni

## Po zaključku (2 letni IEF): MC Career Integration Grant

- 4 letni raziskovalni projekt za integracijo v EU državo, skupaj 100kEUR,
- Prijavni postopek zelo podoben kot IEF štipendija
- Poraba za opremo, plačo, plačilo študentov

FREEFLUID (na FMF UL): raziskava nove metode brezkanalne tekočerkristalne mikrofluidike

