

Particle Theory: Programme Overview

Simon Hands (co-chair PPGP)

UK PP Town Meeting
RAL, 21st July 2014

CGI3 run along very similar lines to CGI1

Bidding process brought forward by 12 months to synch with PDRA hiring
2 year gap \Rightarrow strong case for continuity

A new feature: only one theory CG per university

PPGP membership

Simon Hands (Swansea, chair) lattice
Silvia Pascoli (IPPP Durham, core) pheno
Luigi Del Debbio (Edinburgh) lattice
Mark Hindmarsh (Sussex) cosmo
Neil Lambert (KCL) strings
Apostolos Pilaftsis (Manchester) pheno/cosmo
Radu Tatar (Liverpool) strings
Robert Thorne (UCL) pheno
Joel Goldstein (Bristol, exp chair)
Matthew Wing (UCL, exp core)

Consolidated Grants 2013

17 applications from 23 institutions
(5 from consortia)

supporting 185 academics in 48 scientific areas

1 new group (Surrey) bid in 2013

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Indicative Budget

	14/15	15/16	16/17	17/18
PPGP(T) grants line	5354	5530	5562	5798
PPGP(T) post PR/SR	5030	5030	5030	5030
Committed	2426	20	-	-
Conferences/New Applicants	23	25	25	25
Isaac Newton Institute	100	100	100	100
Available	2805	5385	5437	5673
Requested	8036	16242	15817	8097
Δ	-5231	-10857	-10380	-2424

Timetable

- 12/12/12 Guidelines published
- 6/2/13 Deadline for proposals
- 2 - 5 /13 Referee assessment
- 5/13 Panel scoring of proposals
- 18-19/6/13 PPGP meeting
- 24/6/13 follow-up telecon
- 11/7/13 accepted by Science Board
- 10/13 first announcements to PIs
- 5/14 final announcements to PIs

105 referees (UK + international) used - average of 6 per bid.
Referees comment on particular scientific areas, not whole bid.
Comments sent to PIs, responses considered by PPGP

Assessment Criteria

Category 1	Category 2
Scientific Excellence	Productivity
International Competitiveness	Quality of Leadership
Strategic Value	Suitability of Institution

Scores based on Category 1 used to perform initial ranking.
Subsequent reranking at Panel meeting mainly focussed on mid-list.

No panellist scores or comments on bid from own institution.

DiRAC HPC recurrent costs

Recent BIS/STFC capital investment in HPC has not been matched by sustainable recurrent funding (electricity, system support...)

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Pending Programmatic Review, DiRAC users (lattice QCD, cosmology) were advised by STFC to bid for recurrent costs in CGI 3

Total bid £1.86M for 2014-17 (~11% of programme) revised downwards to £1.19M in consultation with DiRAC PMB, Project and Technical Directors

The Outcome

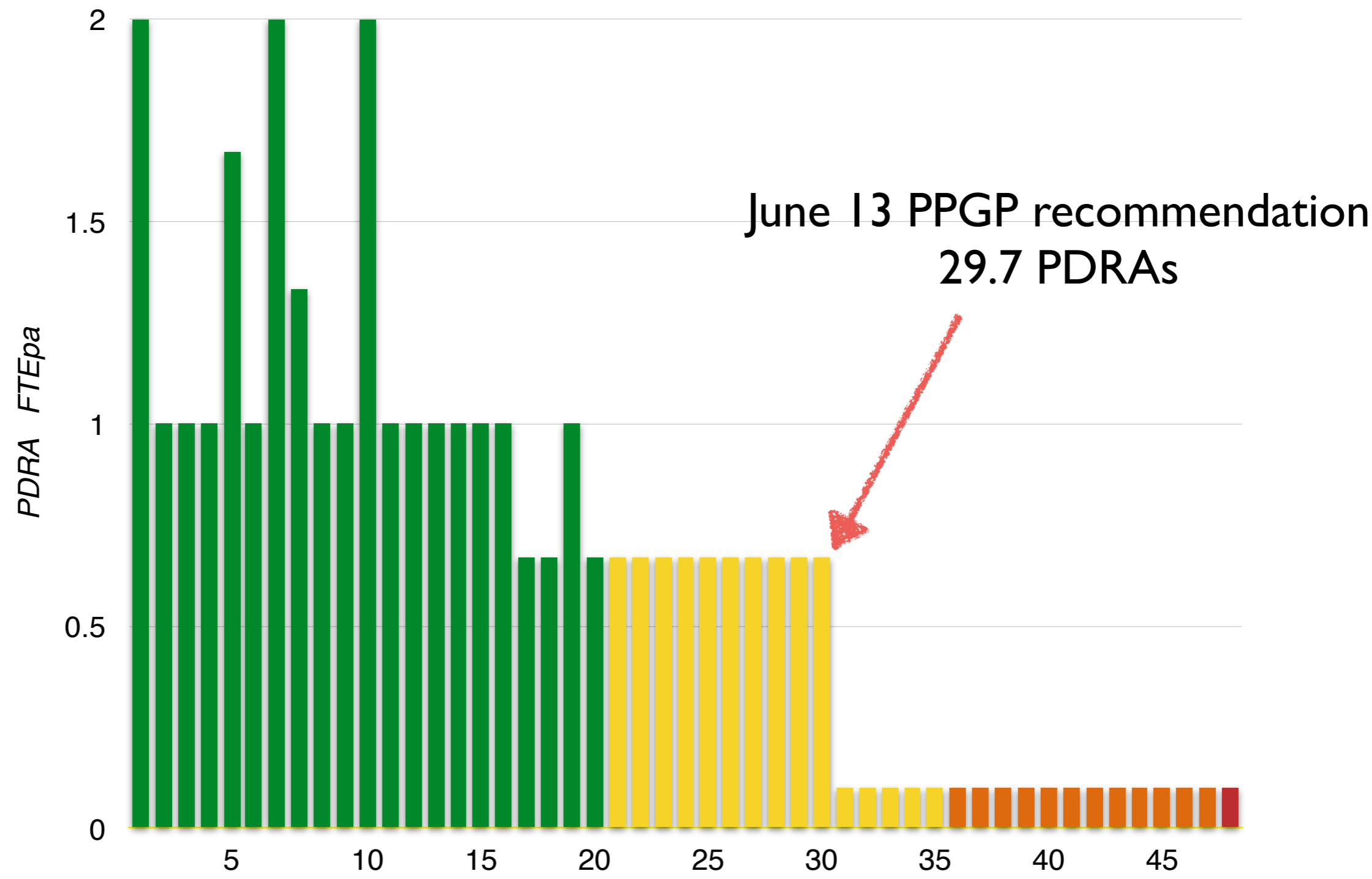
Initial scan of bids yielded *optimal funding scenario*

	PDRAs	students	core FTE	academic FTE
Fundable	51.7	3	1.4	88.6
Funded	28	1	1 → 0 (DiRAC)	23.7

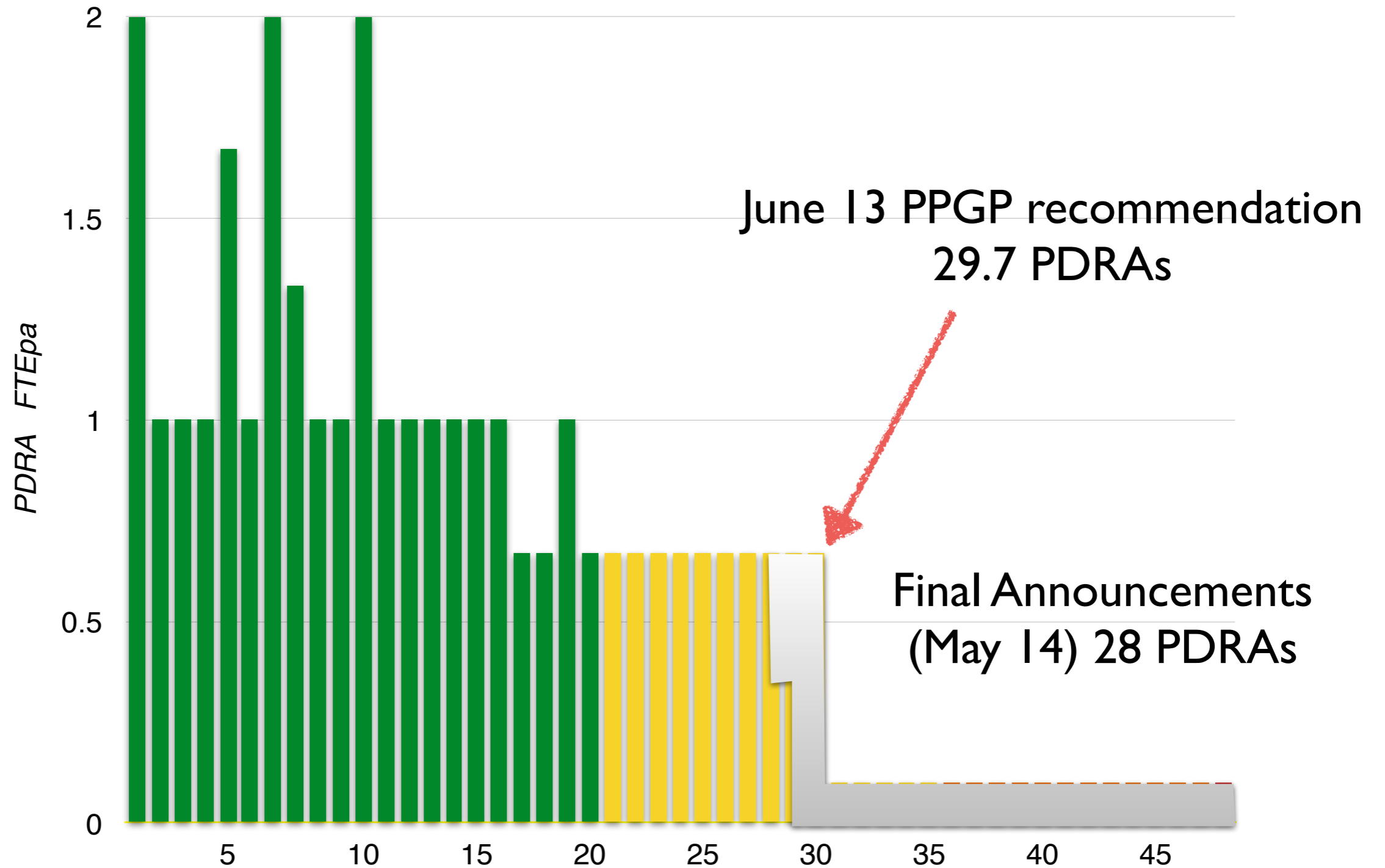
Projects recommended funding in three bands:

	# projects	PDRAs	academic FTE	max FEC
leading	20	23	11.7	20%
important	15	5	9.3	15%
competitive	12	-	2.7	10%
not funded	1	-	-	-

PDRA distribution by band...

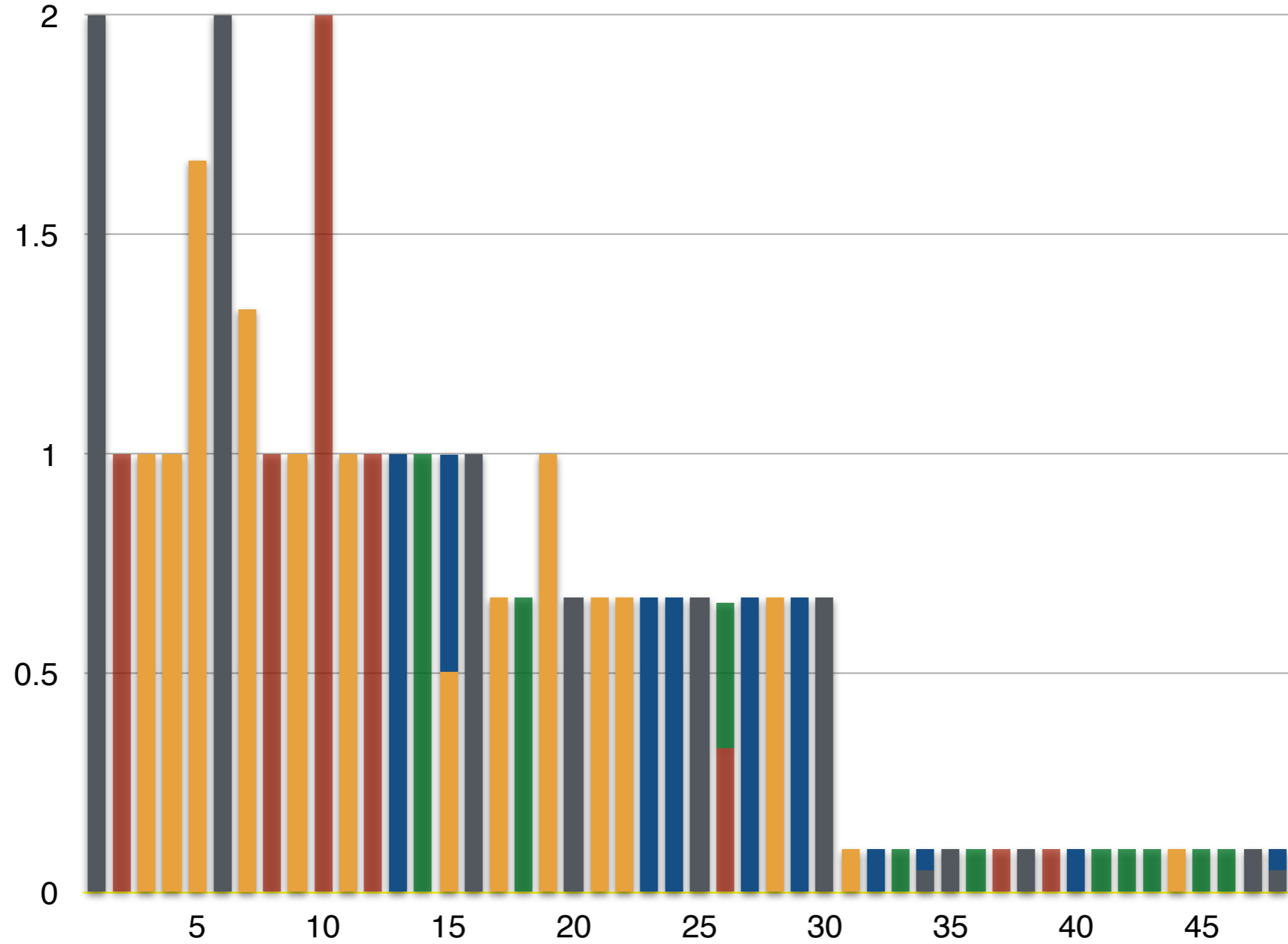


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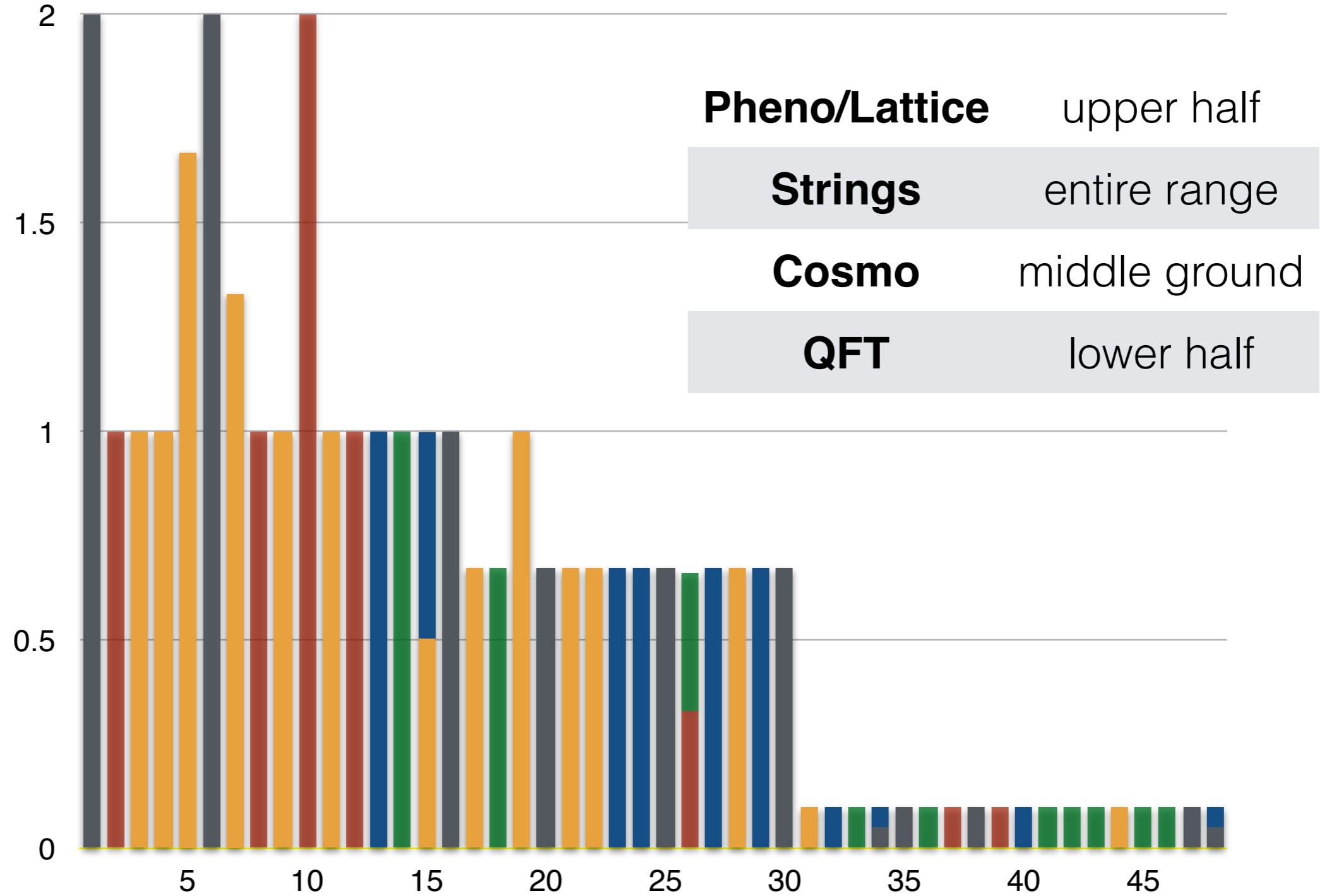
... and PDRA distribution by tribe

strings lattice pheno cosmo QFT



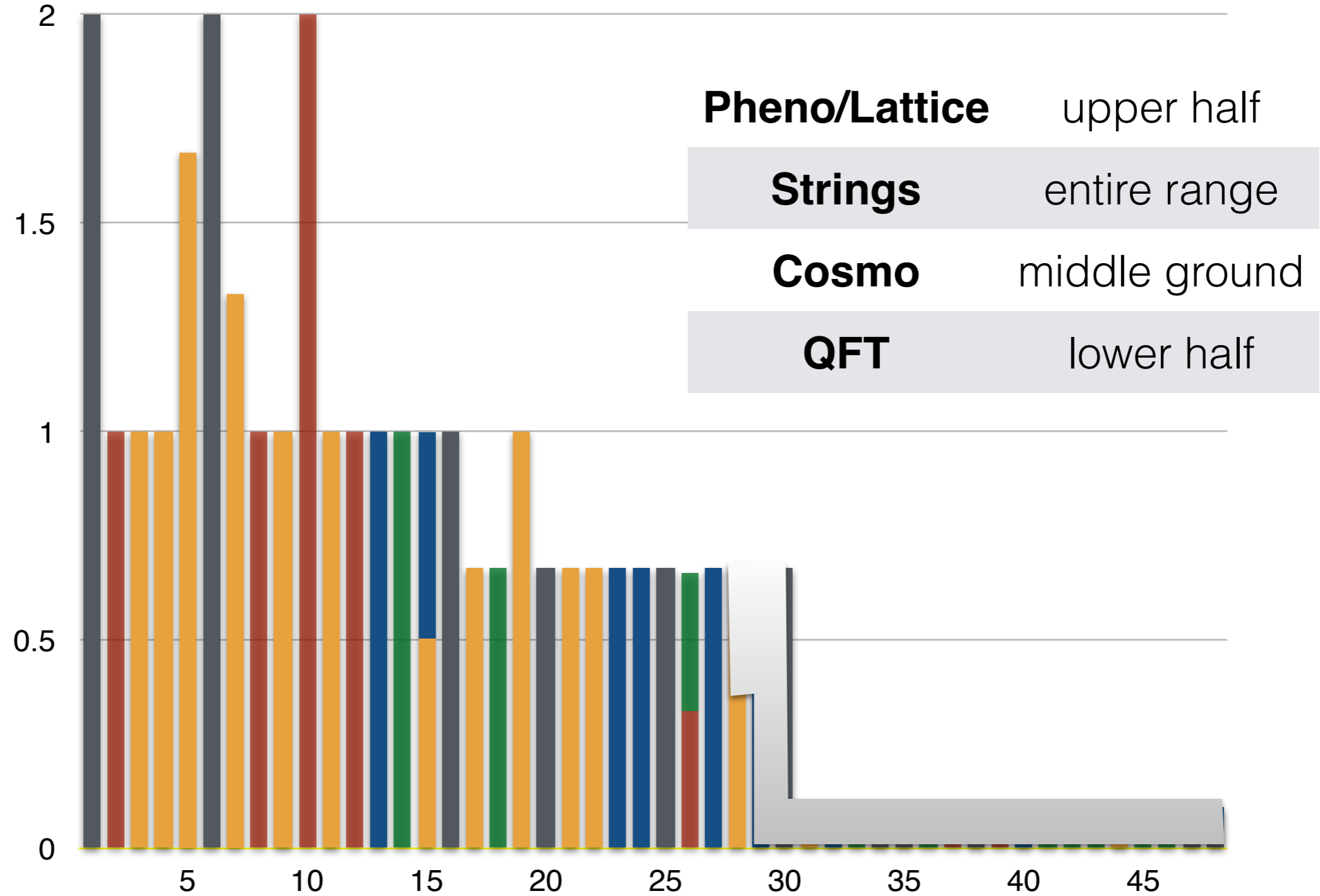
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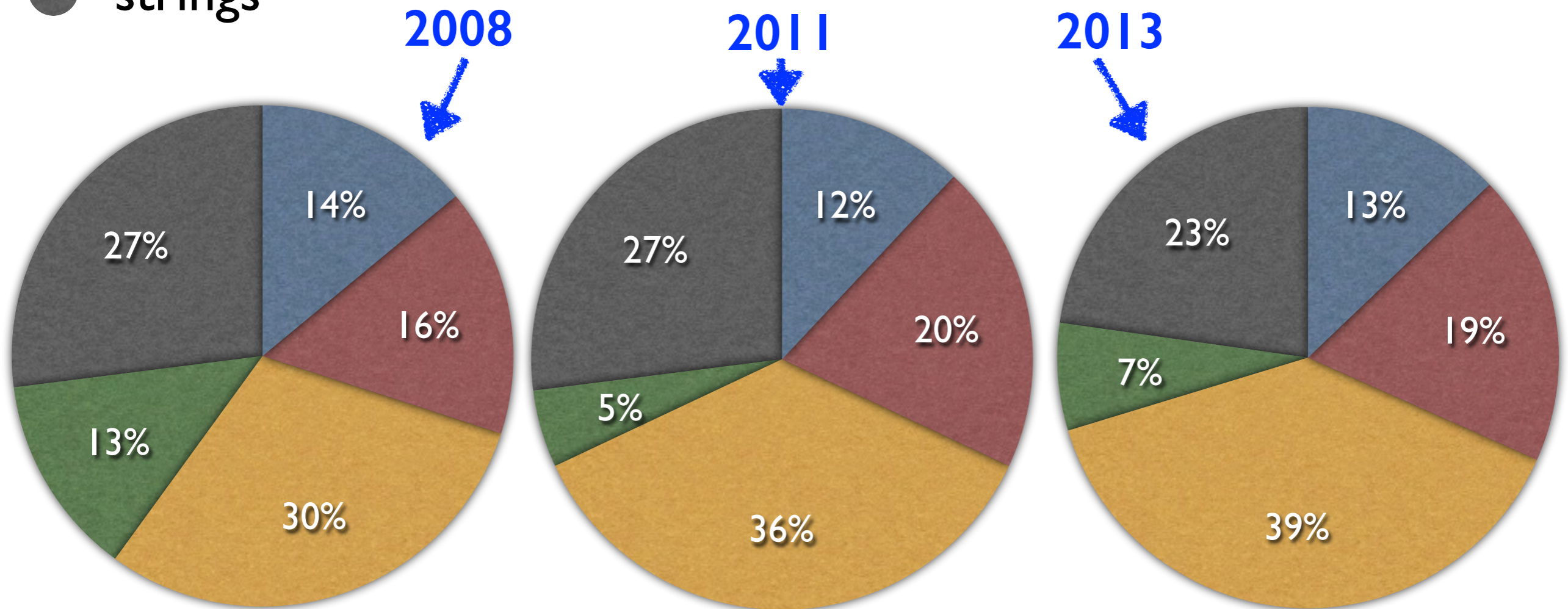
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Slicing the PDRA cake...



- steady growth of pheno - onset of LHC
- lattice stable - onset of DiRAC
- cosmo bounce (?) - onset of Planck
- decline in strings/QFT over time...

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Another agency coping with difficult times (overseas):

- more holistic approach
- focus on career achievements (topcites, *h*-index)
- record of placement of PDRAs and PGRs

HPC Costs

PPGP recommend award **£893k** over 3 years
(~5.3% of PPGP(T) programme)

Following the publication of the 2012/13 Programmatic Review report, a separate funding line has been set up for DiRAC from FY 2014/15 onwards.

This means that operating costs for DiRAC will no longer be considered as requests to grants panels or directly tensioned against grant panel proposals.

Funds will be transferred from the new DiRAC funding line to the PPGP(T) line to take account of any PPGP(T) grants already awarded with DiRAC operating costs for 2014/15 onwards. Any PPGP(T) grants awarded after the publication of the PR report will not include DiRAC costs.

Future proposals to PPGP(T) should not include requests for DiRAC operating costs. Any researcher needing time on DiRAC should apply via the DiRAC Resource Allocation Committee as previously.

- **New Applicants**

£10k pa set aside for new appointments

- **Conferences/Short Courses**

£15k pa (small increase)

enquiries to Jane Long

Jane.Long@stfc.ac.uk

- **Isaac Newton Institute**

£100k pa to INI

≈ 2 major programmes in PPT over 3 years

Please consider making a bid!

Trends over time

	2005	2008	2011	2013
# bidding academics	122	155	163	185
Budget (inc FEC)	-	£16.4M	£14.5M	£14.5M
maximum FEC	-	28.5%	20%	20%
average FEC	-	20%	14%	16%
PDRAs	34 (+7 SPG)	34.3 (+1 SPG)	29.3	28

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Questions?