SAGEX

Scattering Amplitudes:
from Geometry to Experiment

Welcome to SAGEX

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 764850.

What is SAGEX?

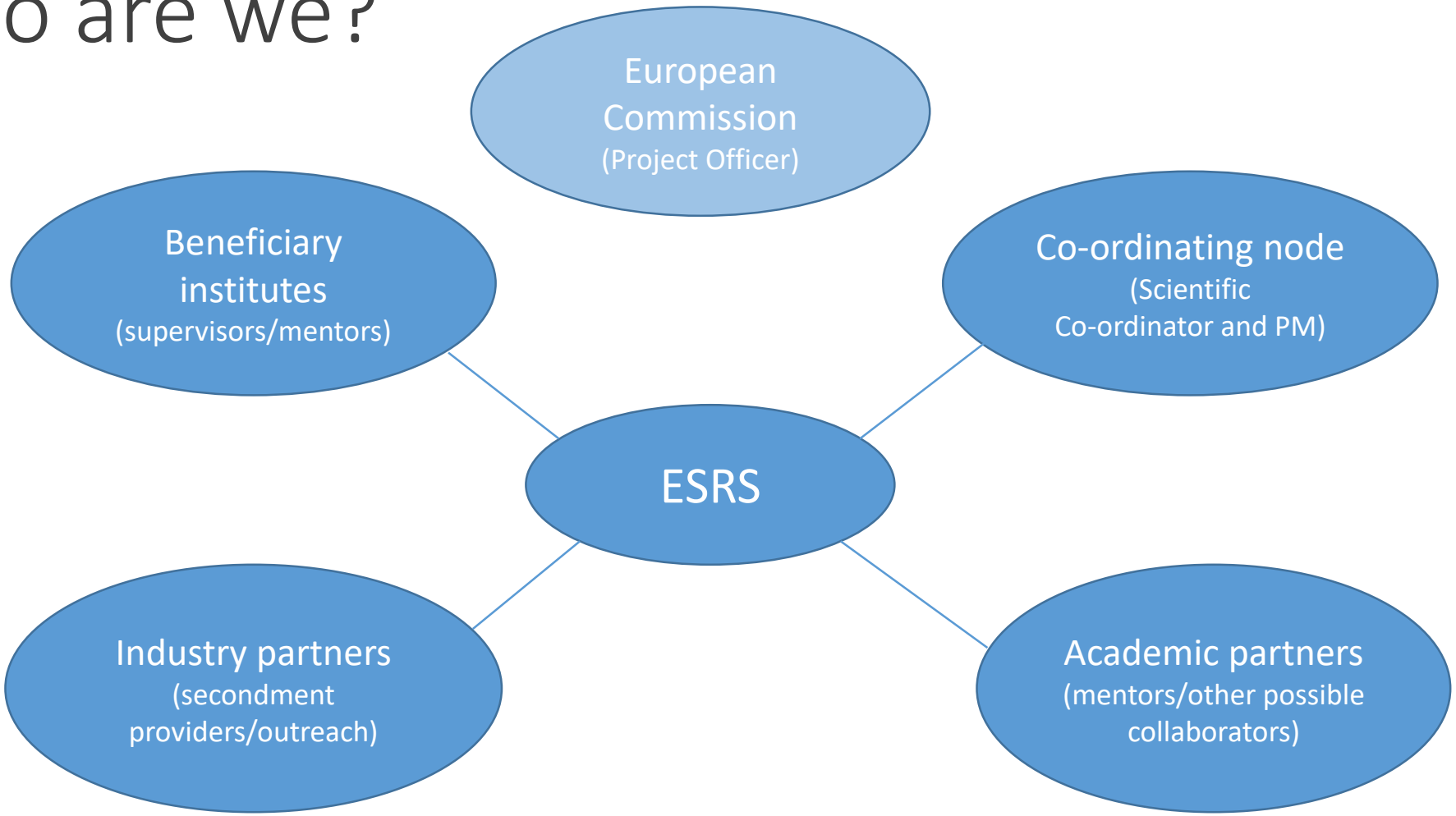
"An Innovative Training Network funded by the European Union to train the next generation of world-leading scientists in the field of scattering amplitudes".

High-value grant: 4 million EUR

Extremely competitive: around 400 applications for ESR positions.

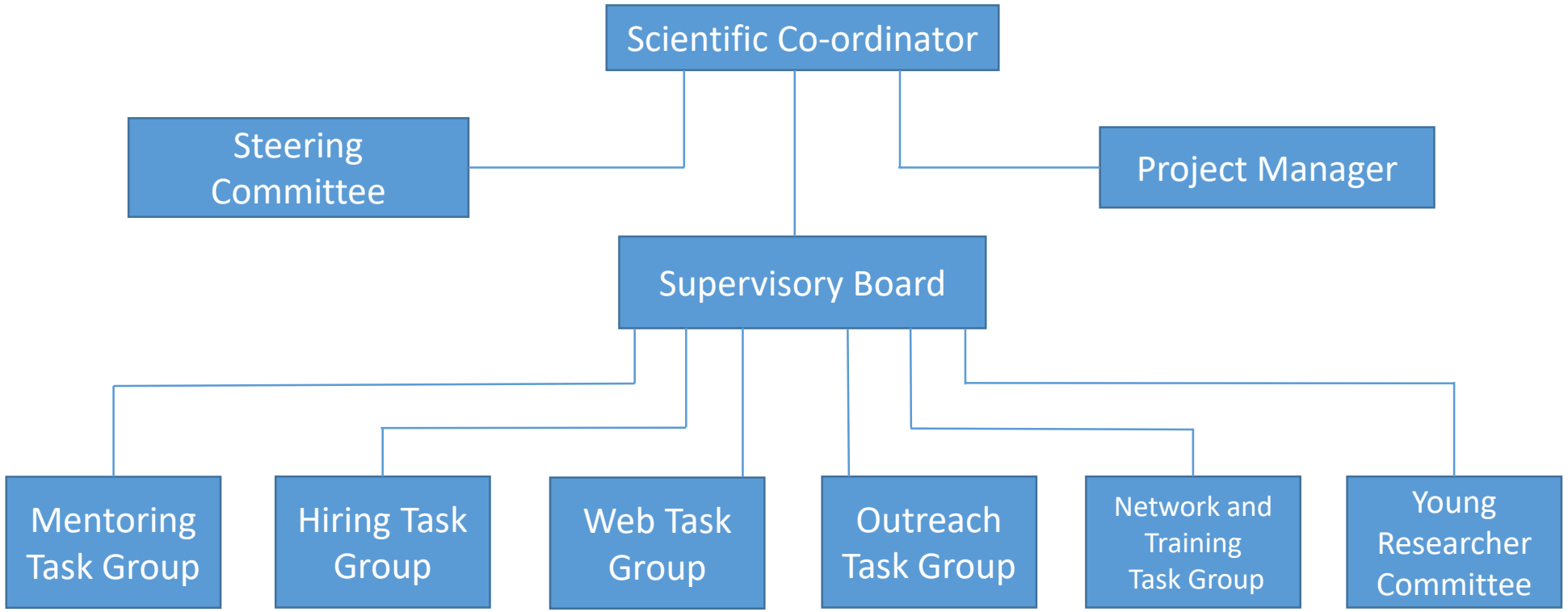
Project content legally agreed with the EU: includes scientific training, soft-skills, secondments, outreach.

Who are we?



An incredible opportunity to network and form links that will help you throughout your career: **be proactive and take advantage!**

Organisational structure



Curriculum

Bespoke scientific and soft-skills curriculum designed by the Network Training Task Group, taught at several ESR schools.

1st SAGEX training school

Start date: July 22, 2019

End date: July 26, 2019

Location: DESY

More information

Core ESR event

Scientific and soft-skills training, including an introduction to scattering amplitudes and advanced topics in string theory and field theory.

Also open to a limited number of external participants.

1st SAGEX workshop

Start date: July 29, 2019

End date: August 2, 2019

Location: DESY

Core ESR event

ESR scientific research talks, soft-skills training, meetings with industry partners and networking opportunities.

Open to SAGEX members only.

Your role:

- Consider your own strengths and knowledge gaps against the curriculum.
- Discuss with your supervisors and mentor.
- Decide what you need to learn immediately for your project/what can wait for the schools.
- Ideally document this plan so you can keep track of your own progress.

Career Development Plans

A chance to formally consider your short- and long-term objectives and related skills gaps.
Intended to help you set and realise your career goals.

Updated every 6 months: since your goals and development needs may change.

Set ample time aside for it: CDPs are to benefit you in the long-run.

Discuss with your supervisor: their experience will be valuable.

Look beyond your scientific goals: what skills and experience do you need to succeed on your chosen career path.

Progression reports

A 20-30 page report due by the end of month 9 of your fellowship.
Allows your progress to be assessed and any issues identified.

Includes an overview of your project's goals and relevant calculations.

Followed by a seminar: given by you, at your own institute.

Reviewed by your supervisors and mentor: will provide constructive feedback; identify potential weaknesses; give advice on how to proceed.

Secondments

All ESRs should undertake an industry secondment of at least 3 months duration.

Compulsory

- Allocations already given
  (subject to acceptance by companies).
- Application process begun for some ESRs.
- Industry Partner Day at the DESY school is planned.
- Support from SAGEX for accommodation while you are on secondment.
- Maintain regular contact with your supervisor.

Optional

- For anyone considering a transition into industry
  (or just interested).
- Rare opportunity to access high profile companies.
- Intended to be later on in your fellowship.
- Exciting and novel applications of the mathematics you are working on.

Mentors

A leading scientist at a different SAGEX node, with complementary academic expertise to you.

Novel insights: might offer an alternative view on your research project.

Research visits: your mentor should host you at some point during your fellowship.

Be proactive: the mentors are busy academics, so expect to put in effort to develop the relationship.

Speak to your supervisor: an introduction by email would be the best place to start.

What if something goes wrong?

If you are worried or unhappy tell someone! We can only fix issues that we know about.

We have a complaints procedure: available on the SAGEX internal Wiki

Speak to your supervisor first: if you don't feel comfortable, talk to your second supervisor or mentor.

If not resolved talk to the Scientific Co-ordinator or PM: we may need to discuss with other network members to find a solution.

We will only discuss with people whose input is required.

Outreach

*All ESRs **must** take part in outreach activities*

Outreach planning meeting, Berlin, 7-8 February.

Central activities:

- Exhibition (planning in progress via monthly meetings).
- Leaflet.
- Film (ESRs submit a 2 minute video every month).
- SAGEX must submit an outreach plan to the EU by September 2019.
- Outreach professionals here to help us.

Local activities:

- ESRs should identify and take part in local outreach e.g. schools talks/festivals.

Please log all outreach activities you take part in – we will request this from you periodically for reporting purposes.

Young Researcher Committee

SAGEX Young Researcher Committee

ITEM 1: Purpose and responsibilities of the YRC

1 April 2019, 15.30 UK time, Durham University

Purpose

The Young Researchers Committee has been set up to provide a forum for the ESRs to discuss their experiences within SAGEX, put forward suggestions for activities or changes, and give feedback on their supervision. The Scientific Co-ordinator (Gabriele Travaglini) will ensure that the views of the YRC are heard by the SAGEX Supervisory Board.

Regular meetings: at least every 6 months.

Run by you: elect a committee Chair.

Report to the Supervisory Board: via ESR representatives.

Wiki and forum

SAGEX Internal Wiki

> By logging into the wiki you agree that **cookies** can be used as part of the authentication process.

This is the internal wiki for the SAGEX project. If you are a member of SAGEX you can create an account

Alternatively you can visit the public SAGEX website

General content

Documentation accessible to the whole SAGEX collaboration.

Project Membership	Project Documentation	General Resources	Outreach
Organisational Structure	Grant Agreement	EU Acknowledgement	Twitter
Early Stage Researchers	Consortium Agreement	Logo Files	Exhibition
Beneficiaries	ESR Curriculum	CDP Guidance	
PartnerOrganisations	Complaints Procedure		
Supervisory Board and Steering Committee	Publication Rules		
Task Groups			

Forum

An online forum for ESRs and other SAGEX members to discuss mathematical problems, forthcoming events, secondments or any other topic.

EU requirements

SAGEX is overseen by Athina Zampara (EU Project Officer) who expects ESRs to be familiar with the following:

- EU Charter for Researchers
- Code of Conduct for Recruitment
- Information note for Marie Skłodowska-Curie Fellows in Innovative Training Networks
- SAGEX Grant Agreement
- MSCA Alumni Association

Wherever you produce materials related to SAGEX you are expected to include:

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If a publication or outreach work is expected to make the mainstream news, the EU must be informed in advance (via Jenna).

Project review meeting

Project review

Date: November 8, 2019

Time: 09:00 - 18:00

Location: Queen Mary University of London

Core ESR event

Formal review with the EU Project Officer, including ESR presentations.

Open to SAGEX members only.

Rough agenda

- Report by the Scientific Co-ordinator on SAGEX progress.
- ESR short presentations (~10 minutes) on their research projects.
- Private meeting between the ESRs and Project Officer.
- Restricted session (Project Officer, Project Manager and lead academics).
- Feedback and open discussion session.

Purpose of the Welcome Meeting

- To get to know each other and begin networking.
- Find out about each other’s research.
- Establish the Young Researcher Committee.
- Begin your soft-skills training:
  Time Management, Good Scientific Practice and How to Survive in Research.