

KT and Medical Applications Funds

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Knowledge Transfer Group - IPT Department

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KT Mission

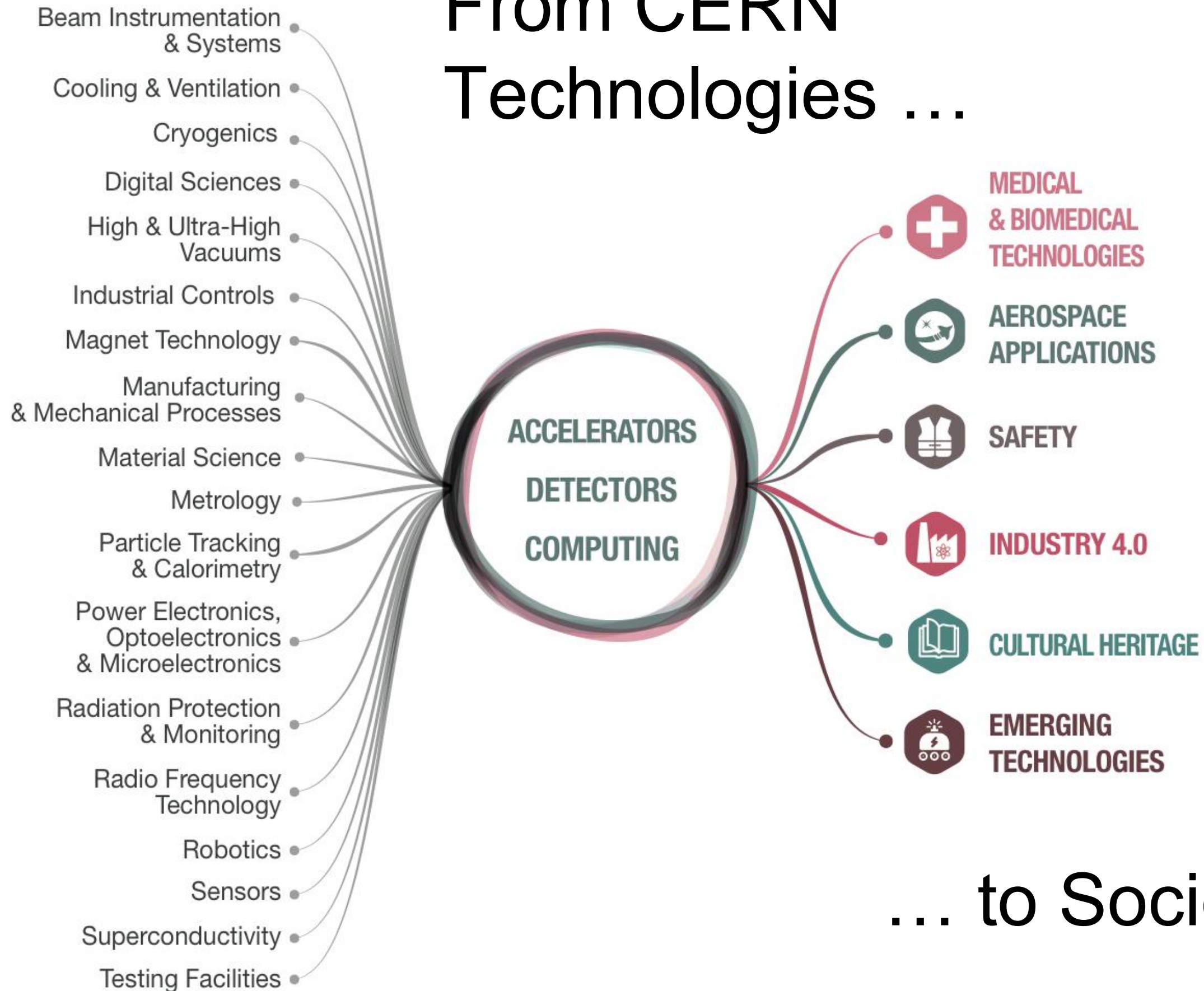
Maximise the technological and knowledge return to society in particular through Member States industry

Promote CERN as a centre of excellence for technology and innovation

Demonstrate the importance and impact of fundamental research investments

Dissemination and Impact

From CERN Technologies ...



... to Society

But...

CERN Technologies need further development to increase their Technology Readiness Level (TRL) and take them to market



- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept
- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 7 – system prototype demonstration in operational environment
- TRL 8 – system complete and qualified
- TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

CERN Knowledge Transfer Fund

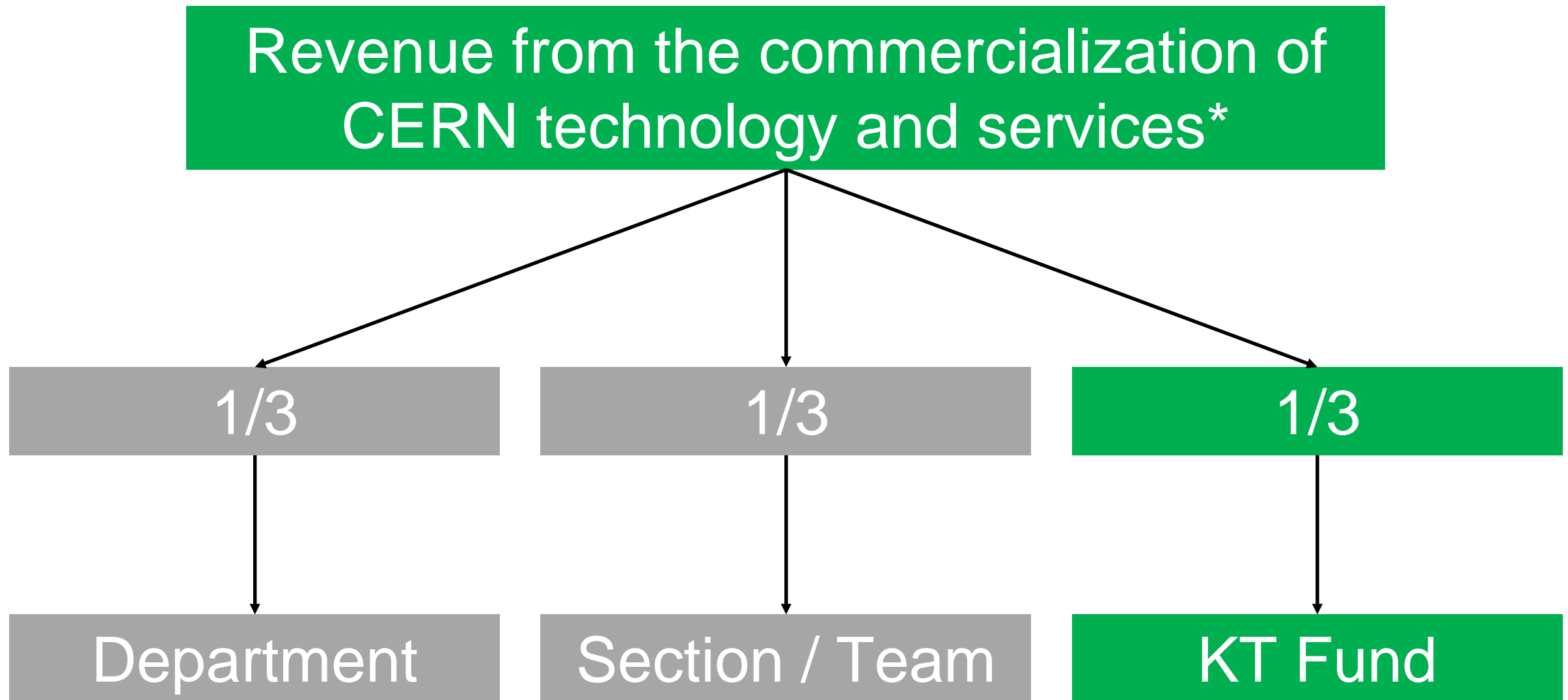
- 41 projects funded since 2011
- 15-220 kCHF range of funding received per project
- 8 CERN departments and units funded since 2011

CERN Medical Applications Budget

- 25 projects funded since 2014
- 64 kCHF average received received per project
- 7 CERN departments and units funded since 2014

“Bridging the gap between research and industry, so that society can benefit.”

KT Fund



*from licensing

When CERN receives overheads (e.g. during consultancy) the income is split 50/50 between the Section/Team and the KT Fund.

KT Fund

What? a tool to bridge the gap between research and industry

How? selects innovative projects based on a CERN technology with high potential for impact in a field outside of high-energy physics (HEP) and for positive impact on society

When? the selection committee meets once or twice a year

The 2018 KT Fund Selection Committee Meeting will take place on Friday 7th December

The 2018 deadline for submissions is Monday 12th November

Eligibility & submission

- Eligible projects are those that would not be funded otherwise. The KT Fund is not a substitute for CERN R&D.
- Only [employed members of personnel](#) can apply (i.e. MPEs).
- The grants can fund [material](#) or [students and fellows](#) related to the knowledge transfer project.
- Project holders may request the support of KT to help assess the [dissemination potential](#) of the technology outside of HEP.

The full eligibility criteria and submission process can be read here:
<https://kt.cern/funding/kt-fund/selection-process>

For any questions please contact: KT-Fund@cern.ch

Selection

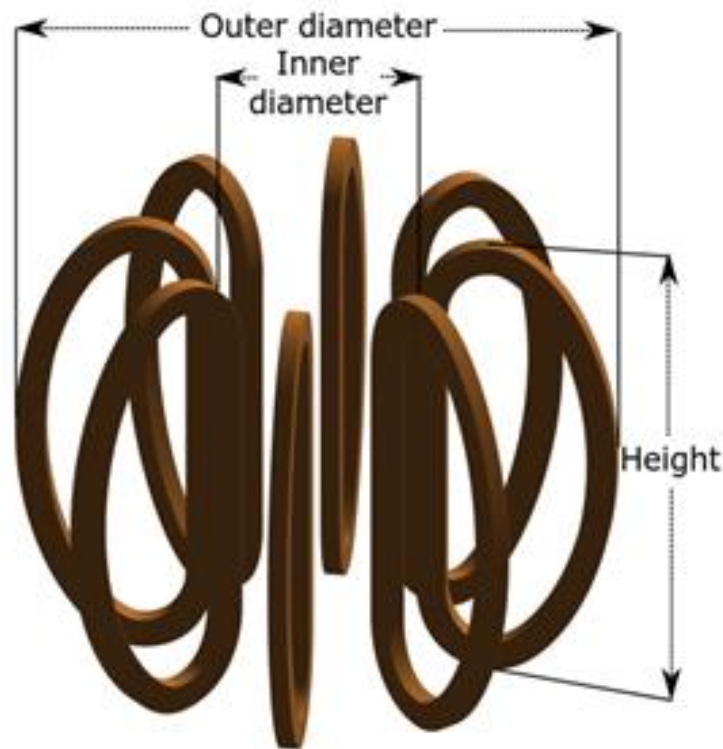
The selection committee is composed of CERN's [Department Heads](#) or their representatives, as well as members of the [CERN Knowledge Transfer group](#).

If invited, you will need to give a short oral presentation on your proposal (5-10 min) and answer questions from the Committee members.

Afterwards, the Selection Committee will evaluate your proposal based on:

- [Proposal Quality](#): Overall quality of contents & structure;
- [Dissemination Probability](#): Likelihood that the outcome of the project will be used outside HEP;
- [Impact](#): Estimation of the potential return for the Organization in terms of image and/or IP exploitation rights;
- [Scientific / Technical value](#): Usefulness for the Organization and for other partner laboratories active in HEP;
- [Potential to generate revenues](#): High score for projects which have a high probability to generate a financial return for the KT Fund.

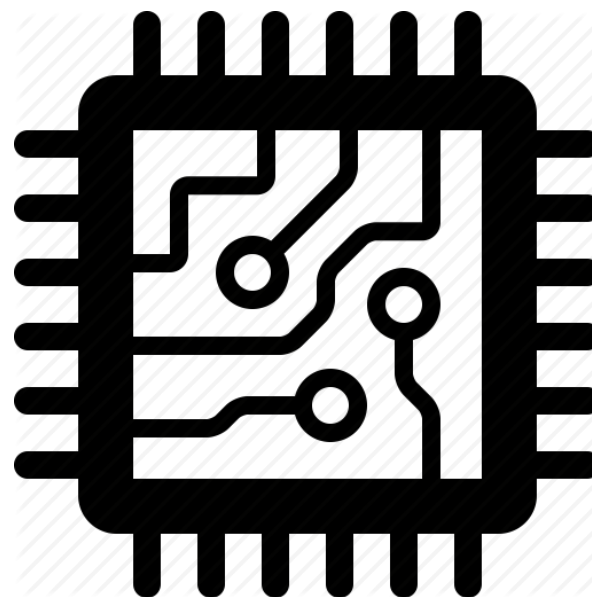
CERN Knowledge Transfer Fund Projects Selected in 2017



A compact superconducting magnet for space applications



A new compact accelerator for cultural heritage



A non-destructive laser application for quality control & radiation studies in semiconductor devices

Medical Applications (MA)

- [Strategy and Framework Applicable to Knowledge Transfer by CERN for the Benefit of Medical Applications](#) (Approved by Council in June 2017)
- An **internal budget line (MA Budget)** has been set up since 2014
- Projects related to medical applications should first apply for funding on the MA budget; if unsuccessful, they can be considered for the KT Fund
- Projects should fit in the high-level strategy (set by the CERN Medical Applications Steering Committee, CMASC)
- Projects must be first presented and discussed at the monthly Medical Applications Project Forum (MAPF), chaired by the KT-MA section leader

More information on the decision-making structure here: <https://kt.cern/cern-medtech-strategy>

For any questions please contact: KT.MedicalApplications@cern.ch

Applying for the MA budget – what's new

The final evaluation of the proposals will be done by the same committee that evaluates KT Fund projects

The committee will meet twice a year
(to have a decision before the fellows/doctoral students selection committees)

On each date, two meetings:

- Morning: MA Budget Selection Committee
- Afternoon: KT Fund Selection Committee (if scheduled)

Applications accepted throughout the year but evaluated at two committee meetings

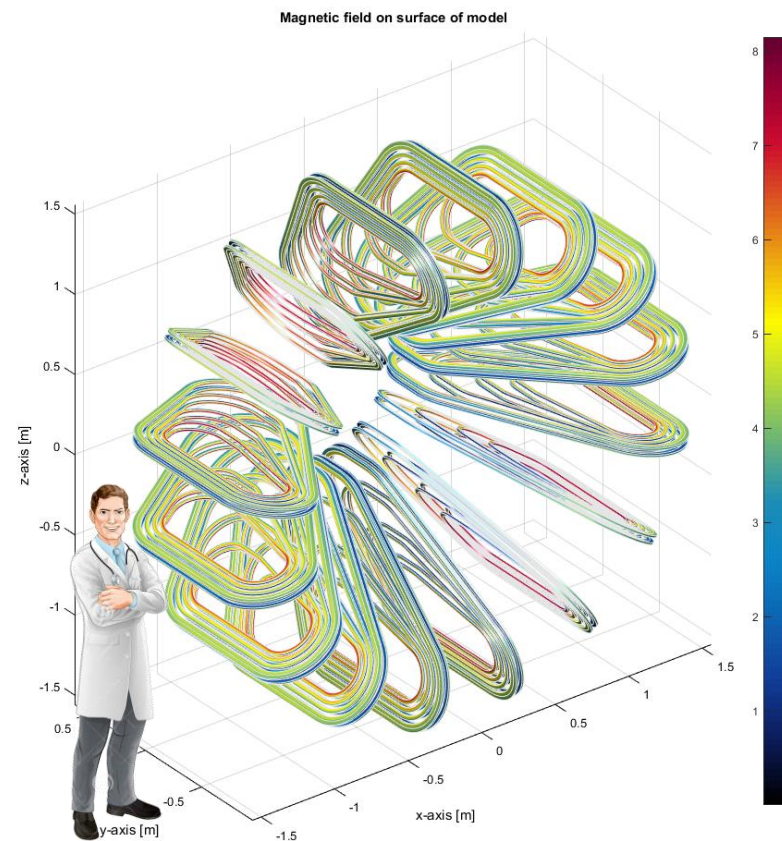
Applying for the MA budget: step by step

- Submission of a written project proposal to the MAPF chair*
- Presentation to the MAPF (held once/month)
- Final submission **by the closing date** of each Selection Committee (signed by the Department Head)
- KT submits its review to the MA Budget Selection Committee
- Presentation to the MA Budget Selection Committee
- Evaluation and decision by the MA Budget Selection Committee

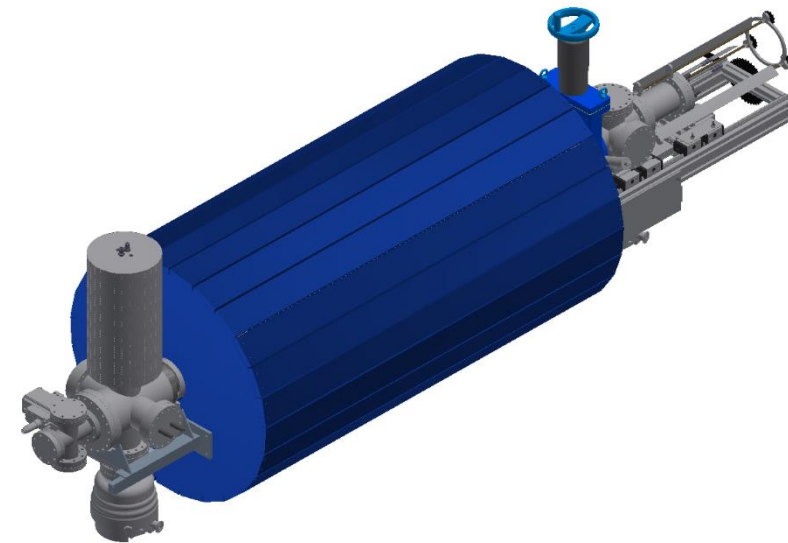
*KT will flag projects that would represent new activities for CERN, and will submit them to the CMASC first

More info on <https://kt.cern/funding/medtech/ma-budget>

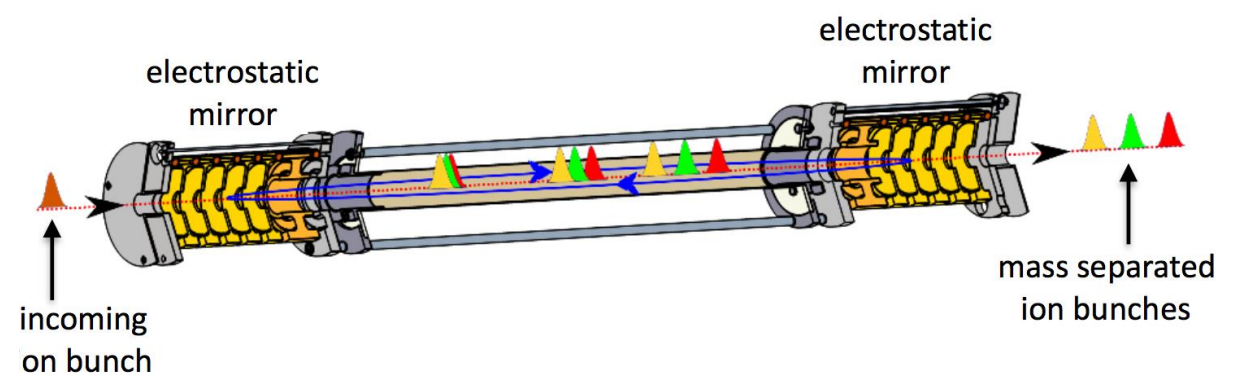
Some recently approved MA projects



GaToroid: A Novel Superconducting Compact and Lightweight Gantry for Hadron Therapy



MEDeGUN: electron beam ion source



A fast, highly selective mass separator for medical isotopes

Many thanks for your attention

The next deadline for KT Fund and MA Budget submissions is
Monday 12th November