We believe diversity and inclusion can accelerate showing the value and impact of fundamental HEP research.
1. Invite Society to our comfort zone
2. Explain our needs and solutions
3. Connect it to benefits of society
1. Leave our comfort zone to other domains
2. Bring our methods to societies' needs
3. Connect it to our world without need to explain it
Co-creation turns Diversity & Inclusion from a moral obligation into a fundamental necessity
Keeping semiconductor detector dry &
Allowing ICRC Forensic teams to
longer visually identify dead bodies
have very similar needs
Backpack for Demining Dogs to make their survey 3 to 10 times faster
:: challenges ::

>16 events
>50 challenges
>1000 participants

CERN MEDical TECHNOLOGY HACKathon
April 6th-9th 2018
Medtech.Hack@cern.ch
indico.cern.ch/e/medtechhack18

D. Dobos :: THE Port :: Using HEP Expertise for Social & Humanitarian Impact
‘Landau’-like age distribution (peak ~30y)

~40-55% female participants
~1/3 human aid
~1/3 technology
~1/3 other backgrounds
We demonstrate the value of fundamental science to society.
When facing critical decisions, we empower to overcome limits of personal networks & information overflow

Because the world needs better answers
We incubate in the Human Aid community to not compromise integrity of our vision & bring latest collaboration technology to the world’s greatest needs.
So decision makers can save critical time, have a life-changing impact and be the heroes that our world needs.
Lisa has the new task of installing water pumps in Sana’a, Yemen.
She asks a few friends and colleagues she assumes to have relevant knowledge.
Her friend John remembers meeting …
Her friend John remembers meeting Richard who installed pumps in Mogadishu.
Richard worked with Absimil who says …
Richard worked with Absimil who says, that Hani is the pump installation expert.
Hani connects Lisa to her colleague Jalal, who installed pumps in Ta’izz, 200 km from Sana’a.
Connecting Lisa & Jalal allows for the most efficient knowledge sharing possible.
Best chance: avoid duplication, build on best practice, sharing failures & trustable advice.
But success highly dependent on starting network, availability, cooperation … LUCK.
Knowledge Exchange increases the probability to make essential connections, …
..., by increasing bandwidth, automation & incentives at each connection point.
With **gluonNet** Lisa can ask her entire network, the system highlights it only to contacts with relevant information.
Jalal (& others) can receive many requests, the system highlights only those matching his experience & expertise.
Lisa rates Jalal for the knowledge and advice he provides. He receives Share Gluons.
And John, Richard, Absimil & Hani receive Connection Gluons for their contributions.
High-level sharer’s & connector’s questions create higher gluon rewards for answers.
Connectors can decide to automate introduction for high level questions.
Sharing & connecting are documented and recognised in a persistent & transparent way.
Knowledge Exchange is information pull-based & need-driven to minimise work.