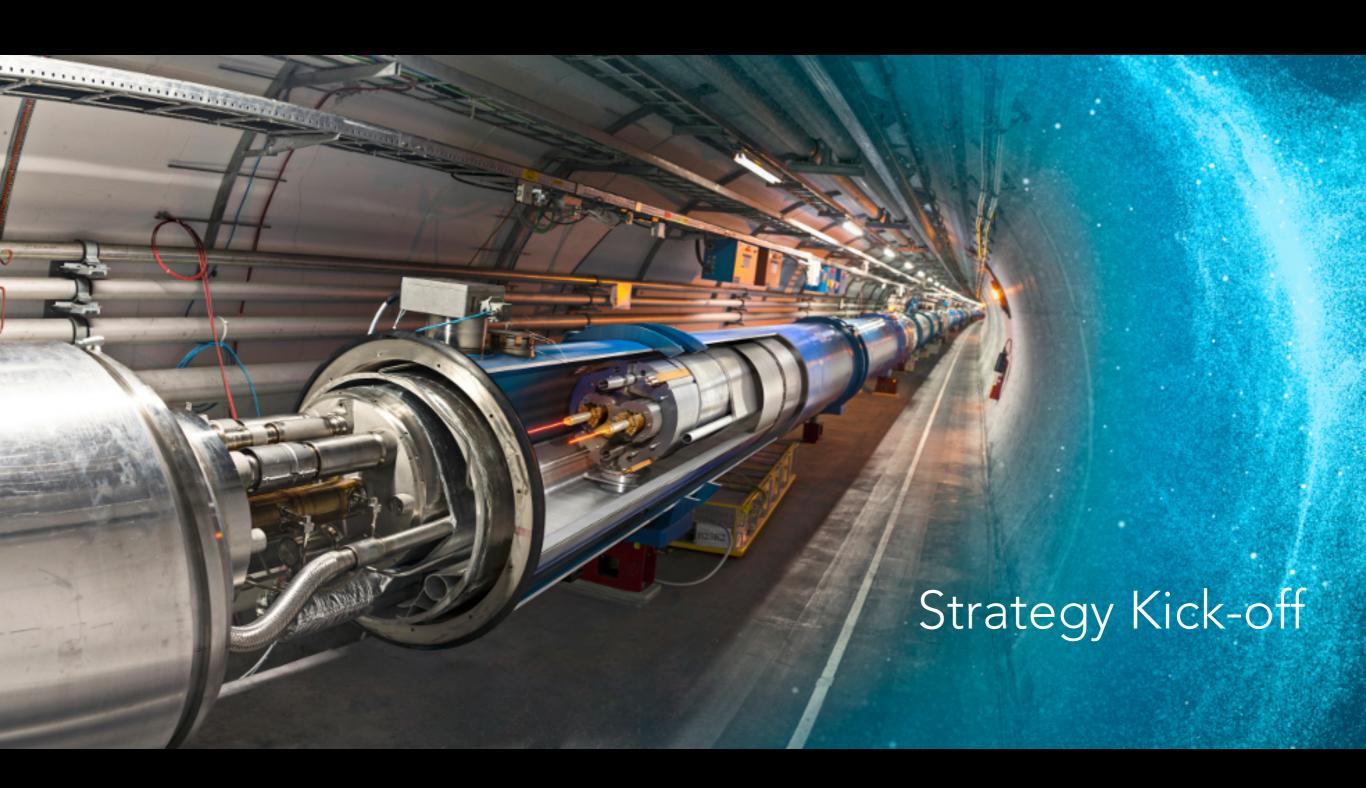
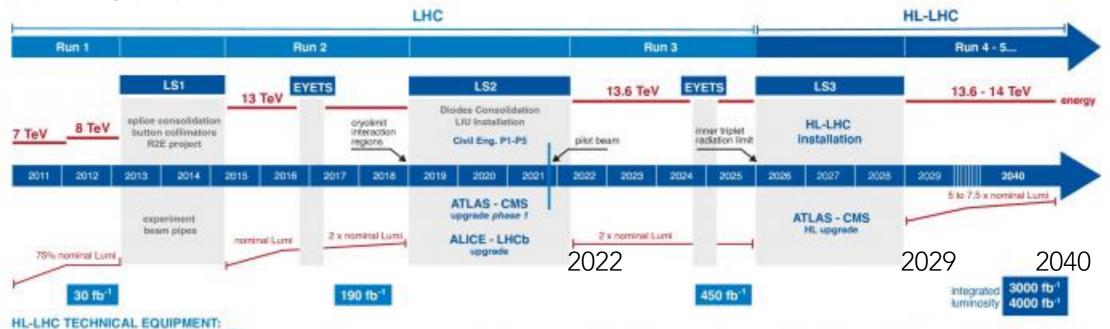
# NORWEGIAN CENTRE FOR CERN RELATED RESEARCH



#### CENTRE TIMELINE

#### **New LHC timeline**



 Centre timeline
 2020
 2023
 2024
 2027

 1st period ★
 2nd period
 ?

- ★ Mid-term evaluation Coincides with the NFR physics evaluation
- 20-30 years to build new accelerators and experiments

#### STRATEGY WORK

This work will be Important for the following reasons:

- Review and if possible improve our scientific goals
- Help achieve our scientific goals
- Help optimise our resources
- Help to secure the continuation of the centre beyond 2023/2027

#### Questions to be answered:

- What are our possibilities?
  - LHC period
  - HL-LHC period
  - Beyond LHC period
  - For the different research and technology areas we have
- What are our advantages, what do we do particularly well
  - Expertise
  - Collaboration
- What do we need to learn, understand and build to be successful?
  - Knowledge, expertise, training
  - Facilities, infrastructure
  - Collaborations ...

#### Outcome:

- Updated scientific goals for the next 10 years
- Roadmap describing how we plan to achieve these goals

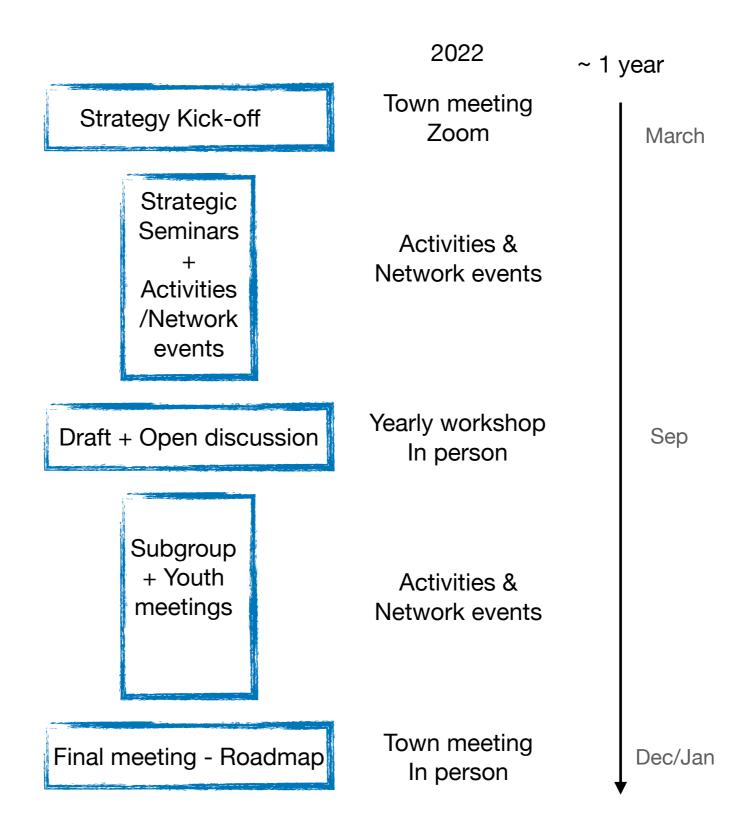
# STRATEGY WORK

Suggestion for process to be discussed later today

~ 1 year to discuss

Workshop in person

Try to overlap with existing meetings as much as possible



## FROM THE 2019 APPLICATION

**Scientific vision:** Norwegian Research at CERN aim to research and discover new knowledge about the fundamental particles and the laws of the Universe

The **primary objective** is to discover the nature of the Universe by answering fundamental research questions such as: what are the building blocks of nature and how do they interact, how did the birth and evolution of the universe happen and how are heavy elements in the Universe created.

- Fully exploit the scientific potential of the Large Hadron Collider (LHC) at the experiments ATLAS and ALICE
- To research and construct the experiment upgrades for the High-Luminosity Large Hadron Collider (HL-LHC) for ATLAS and ALICE
- Fully exploit the scientific potential of the HL-LHC, which is expected to run until 2036.
- To prepare for a post-LHC high-energy accelerator project through design studies, research (CLIC, Awake) and construction
- Exploit the low energy research program at CERN through the ISOLDE experiment
- Pursue novel avenues for research through small-scale experiments at CERN. In addition to these scientific goals, the program aim to:
  - Train a new generation of scientists and engineers
  - Engage industry in Norway for deliveries and collaboration, and facilitate technology transfer Inspire and nurture scientific awareness among the general public

#### SIMPLIFIED

#### **EXPERIMENTS**

Enable and secure
Norwegian long-term
experimental activity
at CERN

#### **RESEARCH**

"Perform worldclass physics research pushing the frontiers of science and technology"

# **EDUCATION** & TRAINING

Educate and train students (technical, BSc, Master, PhD), Postdoctors and researchers ...

#### **COLLABORATION**

Unite people in Norway working on CERN related research

#### **INTERACTION**

Dissemination,
Outreach, Exploitation
(ILO/TTO, high-school visits at CERN, ...)

### GOAL OF TODAYS MEETING

#### What are our possibilities?

- For the "LHC period"
- For the "HL-LHC period"
- "Beyond LHC period"
- For all the different research and technology areas we have

#### What do we do particularly well?

- Expertise
- Collaboration

#### Outcome of todays meeting:

- List of possibilities/opportunities/areas of focus
  - All the ideas on the table
- Plan for further discussions during the next year including workshop