



All scientists retreat: Energy Frontier

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SAC Meeting
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Plan for the Preparatory Meetings

- The EF group continued to meet after the 2018 All Scientists Retreat
 - Monthly meetings to review the progress of the R&D and of the proposed machines (including physics case)
- For the 2019 Retreat we plan to review the machines proposed during the 2017 and 2018 Retreats (see next slide) and prioritize the experiments in view of the updated performance assessments
 - Submissions to the European Strategy
<http://europeanstrategyupdate.web.cern.ch>
- In preparation for the June 2019 Retreat, we plan to invite all FNAL physicists and local users to 4 prep meetings
 - Overview of the process (end of March)
 - Discussion of pp colliders (mid April)
 - Discussions of lepton-lepton colliders (end of April) → submission of non-prioritized consolidated list of colliders for SAC survey
 - Discussion of priorities (by June 14th)

Outcome of the 2018 Retreat

		<u>TeV, c.m.</u>	C, km	Site	Comments
HE-LHC	<u>pp</u>	25	26.7	CERN	16 T SC magnets
HE-FNAL	<u>pp</u>	27	16	FNAL	24T SC magnets
VLHC-I	<u>pp</u>	40	233	FNAL-IL	2T SC super ferric
FCC	<u>pp</u>	100	100	CERN	16 T SC magnets
SSC-II	<u>pp</u>	100	87	Texas	16T SCM, finish SSC tunnel
<u>Desertron</u>	<u>pp,pbar</u>	100	270	Texas	4.5T SC magnets
Higgs-F	<u>e+e-</u>	0.25	16	FNAL	100MW SRF
ILC	<u>e+e-</u>	0.25	~50	Japan	35+ MV/m SRF, 300MW
CLIC	<u>e+e-</u>	0.38	~50	CERN	100+ MV/m NC RF
MC-HF	<u>u+u-</u>	0.12	~2	FNAL	SC mag, low-L
MC-6	<u>u+u-</u>	6	16	FNAL	10T SCM, SRF, pulsed 3T

R&D