

Particle Physics Division Fachverband Teilchenphysik (T)

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Overview of Invited Talks and Sessions

(Lecture halls H-Aula, H-HS I-VI, H-HS VIII-XVII, H-ÜR 1, H-1.002, H-1.003, H-1.004, L-2.004, L-2.017, L-3.001, L-3.002, L-3.015, L-3.016, L-4.001; Poster Grotte)

Prize Talk of the Laureate of the Hertha Sponer Prize 2020

T 67.1 Thu 13:15–13:45 H-Aula **Dark Matter searches at the LHC — •PRISCILLA PANI**

Hauptvorträge (Invited Talks)

T 2.1	Mon	11:15–11:55	H-Aula	Physics Beyond Colliders — •JOERG JAECKEL, PHYSICS BEYOND COLLIDERS STUDY GROUP
T 2.2	Mon	11:55–12:35	H-Aula	Going the extra mile to push the frontier — •ALEXANDER MANN
T 2.3	Mon	12:35–13:15	H-Aula	Cosmic Nucleosynthesis as a Multi-Messenger Challenge — •ROLAND DIEHL
T 22.1	Tue	11:00–11:45	H-Aula	Flavor directions beyond the standard model — •GUDRUN HILLER
T 22.2	Tue	11:45–12:30	H-Aula	Highlights from the LHCb experiment — •MICHEL DE CIAN
T 66.1	Thu	11:00–11:45	H-Aula	No Time to Die? Scrutinising the SM and other Top Stories — •REINHILD YVONNE PETERS
T 66.2	Thu	11:45–12:30	H-Aula	The Higgs boson at the LHC: a glimpse under the peak — •MATTHIAS SCHRÖDER
T 90.1	Fri	9:00– 9:45	H-Aula	Probing the neutrino mass scale - first results of the KATRIN experiment — •KATHRIN VALERIUS
T 90.2	Fri	9:45–10:30	H-Aula	The European Strategy in Particle Physics — •URSULA BASSLER

Eingeladene Vorträge (Invited Topical Talks)

T 44.1	Wed	14:00–14:30	H-Aula	Cosmic Particles at Extreme Energies — •MICHAEL UNGER
T 44.2	Wed	14:30–15:00	H-Aula	IceCube Upgrade - The next level in precision neutrino physics at the South Pole — •LEW CLASSEN
T 44.3	Wed	15:00–15:30	H-Aula	Exploring coherent neutrino-nucleus scattering with the NUCLEUS experiment — •RAIMUND STRAUSS
T 44.4	Wed	15:30–16:00	H-Aula	Can beam-dump experiments uncover the hidden sector? — •MARKUS CRISTINZIANI
T 45.1	Wed	14:00–14:30	H-HS X	A large Scintillating Fibre Tracker for the LHCb Upgrade — •XIAOXUE HAN
T 45.2	Wed	14:30–15:00	H-HS X	The CMS pixel detector: ready for the future? — •JORY SONNEVELD
T 45.3	Wed	15:00–15:30	H-HS X	Full event interpretation at Belle II — •WILLIAM SUTCLIFFE
T 45.4	Wed	15:30–16:00	H-HS X	The Physics Potential of CLIC — •ULRIKE SCHNOOR
T 68.1	Thu	14:00–14:30	H-Aula	Assembling the flavour jigsaw (2020 edition) — •OSCAR CATA
T 68.2	Thu	14:30–15:00	H-Aula	Precise predictions for vector-boson scattering at the LHC — •MATHIEU PELLEN
T 68.3	Thu	15:00–15:30	H-Aula	Hunting dark matter on earth and in the sky — •KAI SCHMIDT-HOBERG

T 68.4	Thu	15:30–16:00	H-Aula	Probing cosmic magnetism and fundamental physics with γ-ray propagation — •MANUEL MEYER
T 69.1	Thu	14:00–14:30	H-HS X	Boosting jets in Run 2: highlights from Standard Model measurements and searches for new physics in ATLAS — •CHRIS MALENA DELITZSCH
T 69.2	Thu	14:30–15:00	H-HS X	The decay of Higgs bosons to a pair of tau leptons in the CMS experiment — •HALE SERT
T 69.3	Thu	15:00–15:30	H-HS X	Searches for electroweak supersymmetry: highlights, coverage and limitations — •JEANETTE LORENZ
T 69.4	Thu	15:30–16:00	H-HS X	To the top and beyond: top quarks as a probe of new interactions at the LHC — •KATHARINA BEHR

Invited talks of the joint symposium “SMuK Dissertation Prize 2020” (SYMD)

See SYMD for the full program of the symposium.

SYMD 1.1	Mon	14:30–15:00	H-Aula/HS I/HS X	N-Particle Scattering and Asymptotic Completeness in Wedge-Local Quantum Field Theories — •MAXIMILIAN DUELL
SYMD 1.2	Mon	15:00–15:30	H-Aula/HS I/HS X	First observation of double electron capture in Xe-124 with the dark matter detector XENON1T — •ALEXANDER FIEGUTH
SYMD 1.3	Mon	15:30–16:00	H-Aula/HS I/HS X	Anisotropic Transport of Galactic Cosmic Rays based on Stochastic Differential Equations — •LUKAS MERTEN

Invited talks of the joint symposium “Dark Matter” (SYDM)

See SYDM for the full program of the symposium.

SYDM 1.1	Wed	10:30–11:15	H-Aula	Producing the missing matter of the Universe on Earth — •ALEXANDER GROHSJEAN
SYDM 1.2	Wed	11:15–12:00	H-Aula	Searching for physics beyond the Standard Model in nuclei — •MARTIN HOFERICHTER
SYDM 1.3	Wed	12:00–12:45	H-Aula	Detecting on Earth the missing matter of the Universe — •FEDERICA PETRICCA

Sessions

T 1.1–1.2	Sun	16:00–17:45	P-HS 1	Tutorial: Dark Matter (joint session AKjDPG/T/GR)
T 2.1–2.3	Mon	11:15–13:15	H-Aula	Hauptvorträge (Invited Talks) I
T 3.1–3.3	Mon	16:30–17:15	H-HS I	Other theory topics
T 4.1–4.6	Mon	16:30–18:00	H-HS II	Dark matter: theory
T 5.1–5.6	Mon	16:30–18:00	H-HS III	Machine Learning: QCD and electromagnetic showers
T 6.1–6.6	Mon	16:30–18:00	H-HS IV	Neutrino physics without accelerators I
T 7.1–7.6	Mon	16:30–18:05	H-HS V	Neutrino physics without accelerators II
T 8.1–8.6	Mon	16:30–18:05	H-HS VI	Neutrino astronomy I
T 9.1–9.6	Mon	16:30–18:00	H-HS X	Flavor physics: Lepton universality tests I
T 10.1–10.6	Mon	16:30–18:00	H-HS XI	Top quarks: pair production and tagging
T 11.1–11.6	Mon	16:30–18:00	H-HS XII	Higgs: bosonic decays and quantum numbers
T 12.1–12.6	Mon	16:30–18:05	H-HS XIII	Detector systems I
T 13.1–13.6	Mon	16:30–18:00	H-HS XIV	Pixel detectors I
T 14.1–14.6	Mon	16:30–18:05	H-HS XV	Experimental methods I
T 15.1–15.6	Mon	16:30–18:00	H-HS XVI	Search for new particles I
T 16.1–16.6	Mon	16:30–18:00	H-ÜR 1	QCD theory I
T 17.1–17.6	Mon	16:30–18:00	H-HS XVII	Methods of astroparticle physics I
T 18.1–18.6	Mon	16:30–18:00	L-3.001	Flavor physics: algorithms
T 19.1–19.4	Mon	16:30–17:30	L-3.002	Various topics in astroparticle physics
T 20.1–20.5	Mon	16:30–17:50	L-3.015	DAQ, trigger and electronics I
T 21.1–21.6	Mon	16:30–18:00	L-3.016	Electroweak physics I
T 22.1–22.2	Tue	11:00–12:30	H-Aula	Hauptvorträge (Invited Talks) II

T 23.1–23.6	Tue	17:00–18:40	H-HS I	Dark Matter I
T 24.1–24.6	Tue	17:00–18:35	H-HS II	Detector systems II
T 25.1–25.6	Tue	17:00–18:30	H-HS V	Grid Computing
T 26.1–26.5	Tue	17:00–18:20	H-HS VI	Outreach methods I (joint session T/HK)
T 27.1–27.6	Tue	17:00–18:30	H-HS X	Higgs: Decay into fermions I
T 28.1–28.6	Tue	17:00–18:30	H-HS XI	Top quarks: mass and jets
T 29.1–29.6	Tue	17:00–18:30	H-HS XII	Cosmic rays I
T 30.1–30.6	Tue	17:00–18:30	H-HS XIII	Flavor physics: Lepton universality tests II
T 31.1–31.6	Tue	17:00–18:35	H-HS XIV	Pixel detectors II
T 32.1–32.6	Tue	17:00–18:30	H-HS XV	Neutrino physics with accelerators
T 33.1–33.6	Tue	17:00–18:30	H-HS XVI	Search for new particles II
T 34.1–34.6	Tue	17:00–18:30	H-ÜR 1	QCD theory II
T 35.1–35.6	Tue	17:00–18:30	H-HS XVII	Gamma astronomy I
T 36.1–36.6	Tue	17:00–18:30	L-2.004	Neutrino physics without accelerators III
T 37.1–37.6	Tue	17:00–18:30	L-2.017	Neutrino physics without accelerators IV
T 38.1–38.6	Tue	17:00–18:30	L-3.001	Methods of astroparticle physics II
T 39.1–39.6	Tue	17:00–18:30	L-3.002	Methods of astroparticle physics III
T 40.1–40.6	Tue	17:00–18:30	L-3.015	DAQ, trigger and electronics II
T 41.1–41.5	Tue	17:00–18:15	L-3.016	Electroweak physics II
T 42.1–42.5	Tue	17:00–18:15	L-4.001	Experimental methods II
T 43.1–43.15	Tue	17:00–18:30	Grotte	Poster session Particle Physics
T 44.1–44.4	Wed	14:00–16:00	H-Aula	Eingeladene Vorträge (Invited Topical Talks) I
T 45.1–45.4	Wed	14:00–16:00	H-HS X	Eingeladene Vorträge (Invited Topical Talks) II
T 46.1–46.9	Wed	16:30–18:50	H-HS II	Detector systems III
T 47.1–47.10	Wed	16:30–19:00	H-HS IV	Neural networks and systematic uncertainties
T 48.1–48.8	Wed	16:30–18:30	H-HS V	Pixel detectors III
T 49.1–49.9	Wed	16:30–18:45	H-HS VI	Outreach methods II (joint session T/HK)
T 50.1–50.4	Wed	16:30–18:30	H-HS X	Combined detector session (joint session HK/T/ST/EP)
T 51.1–51.10	Wed	16:30–19:00	H-HS XI	Flavor physics: CKM I
T 52.1–52.9	Wed	16:30–18:45	H-HS XIII	Neutrino physics without accelerators V
T 53.1–53.10	Wed	16:30–19:00	H-HS XIV	Dark Matter II
T 54.1–54.10	Wed	16:30–19:00	H-HS XV	Axion like particles I
T 55.1–55.10	Wed	16:30–19:00	H-HS XVI	Search for new particles III
T 56.1–56.9	Wed	16:30–18:45	H-ÜR 1	Experimental methods III
T 57.1–57.7	Wed	16:30–18:15	H-HS XVII	Silicon strip detectors
T 58.1–58.10	Wed	16:30–19:00	H-1.002	Higgs: associated production
T 59.1–59.10	Wed	16:30–19:00	L-2.004	Neutrino astronomy II
T 60.1–60.9	Wed	16:30–18:45	L-2.017	Various topics in elementary particle physics
T 61.1–61.9	Wed	16:30–18:45	L-3.001	Methods of astroparticle physics IV
T 62.1–62.10	Wed	16:30–19:05	L-3.002	Cosmic rays II
T 63.1–63.8	Wed	16:30–18:30	L-3.015	DAQ, trigger and electronics III
T 64.1–64.6	Wed	16:30–18:00	L-3.016	Gaseous detectors I
T 65.1–65.10	Wed	16:30–19:00	H-HS VIII	Top quarks: differential cross sections
T 66.1–66.2	Thu	11:00–12:30	H-Aula	Hauptvorträge (Invited Talks) III
T 67.1–67.1	Thu	13:15–13:45	H-Aula	Hertha-Sponer Prize Talk
T 68.1–68.4	Thu	14:00–16:00	H-Aula	Eingeladene Vorträge (Invited Topical Talks) III
T 69.1–69.4	Thu	14:00–16:00	H-HS X	Eingeladene Vorträge (Invited Topical Talks) IV
T 70.1–70.10	Thu	16:30–19:00	H-HS I	Higgs: Decay into fermions II
T 71.1–71.10	Thu	16:30–19:00	H-HS VI	Supersymmetry: Theory and searches
T 72.1–72.9	Thu	16:30–18:45	H-HS IX	Semiconductor detectors
T 73.1–73.10	Thu	16:30–19:00	H-HS X	Multi-messenger astronomy
T 74.1–74.10	Thu	16:30–19:00	H-HS XI	Flavor physics: CKM II
T 75.1–75.10	Thu	16:30–19:05	H-HS XIII	Neutrino physics without accelerators VI
T 76.1–76.10	Thu	16:30–19:00	H-HS XIV	Dark Matter III
T 77.1–77.9	Thu	16:30–18:50	H-HS XV	Axion like particles II
T 78.1–78.9	Thu	16:30–18:45	H-HS XVI	Higgs: Extended models
T 79.1–79.7	Thu	16:30–18:15	H-ÜR 1	Experimental methods IV
T 80.1–80.9	Thu	16:30–18:50	H-1.003	Calorimeters
T 81.1–81.10	Thu	16:30–19:00	H-1.004	Neutrino astronomy III
T 82.1–82.9	Thu	16:30–18:45	L-2.004	Pixel detectors IV
T 83.1–83.10	Thu	16:30–19:00	L-2.017	Search for new particles IV

T 84.1–84.10	Thu	16:30–19:00	L-3.001	Methods of astroparticle physics V
T 85.1–85.10	Thu	16:30–19:00	L-3.002	Cosmic rays III
T 86.1–86.8	Thu	16:30–18:30	L-3.015	DAQ, trigger and electronics IV
T 87.1–87.9	Thu	16:30–18:45	L-3.016	Gaseous detectors II
T 88.1–88.10	Thu	16:30–19:00	L-4.001	Top quarks: associated production
T 89	Thu	19:00–20:30	H-HS I	General assembly - Particle Physics Division (for DPG members)
T 90.1–90.2	Fri	9:00–10:30	H-Aula	Hauptvorträge (Invited Talks) IV
T 91.1–91.8	Fri	11:00–13:00	H-HS I	Machine Learning: Event and jet reconstruction
T 92.1–92.7	Fri	11:00–12:45	H-HS II	Neutrino physics without accelerators VIII
T 93.1–93.8	Fri	11:00–13:00	H-HS IV	Search for new particles V
T 94.1–94.8	Fri	11:00–13:00	H-HS V	Supersymmetry: Searches
T 95.1–95.7	Fri	11:00–12:45	H-HS VI	Experimental methods V
T 96.1–96.8	Fri	11:00–13:00	H-HS X	Higgs: Decay into fermions III
T 97.1–97.8	Fri	11:00–13:00	H-HS XI	Drell-Yan and jet production
T 98.1–98.8	Fri	11:00–13:00	H-HS XII	Topics in flavor physics
T 99.1–99.8	Fri	11:00–13:00	H-HS XIV	Dark Matter IV
T 100.1–100.8	Fri	11:00–13:05	H-HS XVI	Gamma astronomy II
T 101.1–101.7	Fri	11:00–12:45	H-ÜR 1	Neutrino physics without accelerators VII
T 102.1–102.8	Fri	11:00–13:00	L-3.001	Cosmic rays V
T 103.1–103.8	Fri	11:00–13:00	L-3.002	Cosmic rays IV
T 104.1–104.6	Fri	11:00–12:30	L-3.015	DAQ, trigger and electronics V
T 105.1–105.8	Fri	11:00–13:05	L-3.016	Muon detectors
T 106.1–106.8	Fri	11:00–13:00	L-4.001	Top quarks: Single top production
T 107.1–107.8	Fri	11:00–13:00	J-HS C	Combined instrumentation session I: Gaseous detectors (joint session HK/T)
T 108.1–108.8	Fri	11:00–13:00	H-HS XIII	Combined instrumentation session II: Silicon strip detectors (joint session HK/T)
T 109.1–109.7	Fri	11:00–12:45	J-HS K	Combined instrumentation session III: Silicon pixel detectors (joint session HK/T)
T 110.1–110.8	Fri	11:00–13:00	H-HS XV	Combined instrumentation session IV: Semiconductor detectors (joint session HK/T)

Annual General Assembly of the Particle Physics Division (for DPG members)

Thursday 19:00–20:30 H-HS I

- Reports
- Meeting venues
- Decisions in section Materie und Kosmos (SMuK)
- AOB