

Particle Physics Division Fachverband Teilchenphysik (T)

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Overview of Invited Talks and Sessions

Plenary and prize talks

See PV for details.

PV I	Tue	9:00– 9:45	PVa	Physics-Informed AI for Image Reconstruction in PET — ●ANDREW READER
PV II	Wed	9:00– 9:45	PVa	Recent physics highlights of experiments at the LHC — ●WOLFGANG WAGNER
PV III	Wed	19:30–21:30	PVp	Geschüttelt, nicht gerührt! – James Bond im Visier der Physik — ●METIN TOLAN
PV IV	Thu	9:00– 9:45	PVa	Roadmap for Accelerator Development in Response to the 2020 Update of the European Strategy for Particle Physics — ●MICHAEL BENEDIKT
PV V	Fri	9:00– 9:45	PVa	On top of Dark Matter searches at the LHC — ●PRISCILLA PANI

Hauptvorträge (Invited Talks)

T 23.1	Tue	9:45–10:30	Tb	Physics Beyond Colliders — ●JOERG JAECKEL, VARIOUS PHYSICS BEYOND COLLIDERS STUDY GROUP
T 23.2	Tue	11:00–11:45	Tb	Going the Extra Mile to Push the Frontier — ●ALEXANDER MANN
T 23.3	Tue	11:45–12:30	Tb	Cosmic Nucleosynthesis, a Multi-Messenger Challenge — ●ROLAND DIEHL
T 48.1	Wed	9:45–10:30	Tb	Moving ahead with flavor — ●GUDRUN HILLER
T 48.2	Wed	11:00–11:45	Tb	Highlights from the LHCb experiment — ●MICHEL DE CIAN
T 48.3	Wed	11:45–12:30	Tb	Neutrino Oscillations: Status and Prospects — ●ALFONS WEBER
T 73.1	Thu	9:45–10:30	Tb	The Higgs boson at the LHC: a glimpse under the peak — ●MATTHIAS SCHRÖDER
T 73.2	Thu	11:00–11:45	Tb	No Time to die? Scrutinizing the SM and other Top Stories — ●REINHILD YVONNE PETERS
T 73.3	Thu	11:45–12:30	Tb	New detector developments: The next challenges — ●ERIKA GARUTTI
T 99.1	Fri	9:45–10:30	Tb	Probing the neutrino mass scale with the KATRIN experiment — ●KATHRIN VALERIUS
T 99.2	Fri	11:00–11:45	Tb	The quest for precise LHC predictions — ●JONAS LINDERT
T 99.3	Fri	11:45–12:30	Tb	European Strategy for Particle Physics: towards the next collider at CERN — ●URSULA BASSLER

Eingeladene Vorträge (Invited Topical Talks)

T 24.1	Tue	14:00–14:30	Tc	Cosmic Particles at Extreme Energies — ●MICHAEL UNGER
T 24.2	Tue	14:30–15:00	Tc	IceCube Upgrade - The next level in precision neutrino physics at the South Pole — ●LEW CLASSEN
T 24.3	Tue	15:00–15:30	Tc	The NUCLEUS experiment - New physics with coherent neutrino-nucleus scattering — ●RAIMUND STRAUSS
T 25.1	Tue	14:00–14:30	Td	A large Scintillating Fibre Tracker for the LHCb Upgrade — ●XIAOXUE HAN
T 25.2	Tue	14:30–15:00	Td	Assembling the flavour jigsaw (2021 edition) — ●OSCAR CATA

T 25.3	Tue	15:00–15:30	Td	Erste Physik mit “Full Event Interpretation” am Belle II Experiment — •WILLIAM SUTCLIFFE
T 49.1	Wed	14:00–14:30	Tc	A walk through $H \rightarrow \tau\tau$ in the CMS experiment — •HALE SERT
T 49.2	Wed	14:30–15:00	Tc	Looking inside jets - jet substructure techniques and their application in ATLAS — •CHRIS MALENA DELITZSCH
T 49.3	Wed	15:00–15:30	Tc	Real-time track reconstruction with GPUs — •DOROTHEA VOM BRUCH
T 50.1	Wed	14:00–14:30	Td	Gamma-ray Propagation as a Probe for Cosmology and Fundamental Physics — •MANUEL MEYER
T 50.2	Wed	14:30–15:00	Td	Results and Status of the XENON Dark Matter experiment — •MICHAEL MURRA
T 50.3	Wed	15:00–15:30	Td	Opportunistic direct search for axion Dark Matter — •BABETTE DÖBRICH
T 74.1	Thu	14:00–14:30	Tc	Searches for electroweak supersymmetry: highlights, coverage and limitations — •JEANETTE MIRIAM LORENZ
T 74.2	Thu	14:30–15:00	Tc	To the top and beyond: top quarks as a probe of new interactions at the LHC — •KATHARINA BEHR
T 74.3	Thu	15:00–15:30	Tc	Stress testing the Standard Model via vector-boson scattering at the LHC — •MATHIEU PELLEN
T 75.1	Thu	14:00–14:30	Td	Hunting dark matter on earth and in the sky — •KAI SCHMIDT-HOBERG
T 75.2	Thu	14:30–15:00	Td	Gravitational wave astronomy: highlights so far and future detectors — •DAVID S. WU
T 75.3	Thu	15:00–15:30	Td	Advanced Powering of Pixel and Tracking Detectors — •MARTIN LIPINSKI

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

See SYDM for the full program of the symposium.

SYDM 1.1	Mon	10:00–10:45	PVa	New (and old) ideas on dark matter — •BJOERN MALTE SCHAEFER
SYDM 1.2	Mon	10:50–11:35	PVa	Producing on Earth the missing matter of the Universe — •ALEXANDER GROHSJEAN
SYDM 1.3	Mon	11:40–12:25	PVa	Detecting on Earth the missing matter of the Universe — •FEDERICA PETRICCA

Sessions

T 1.1–1.10	Mon	16:00–18:30	Ta	QCD and electroweak interactions (theory)
T 2.1–2.1	Mon	16:00–16:15	Tb	Other Topics
T 3.1–3.8	Mon	16:00–18:00	Tc	Accelerator neutrino experiments
T 4.1–4.8	Mon	16:00–18:00	Td	Quark mixing and CP violation
T 5.1–5.7	Mon	16:00–17:45	Te	Higgs decay in fermions I
T 6.1–6.10	Mon	16:00–18:30	Tf	Flavour physics I
T 7.1–7.10	Mon	16:00–18:30	Tg	Flavour physics V
T 8.1–8.10	Mon	16:00–18:30	Th	Top quark production I
T 9.1–9.9	Mon	16:00–18:15	Ti	Associated Higgs production and Higgs quantum numbers I
T 10.1–10.9	Mon	16:00–18:15	Tj	Gaseous detectors
T 11.1–11.7	Mon	16:00–17:45	Tk	Search for Supersymmetry I
T 12.1–12.9	Mon	16:00–18:20	Tl	Search for New Particles I
T 13.1–13.9	Mon	16:00–18:20	Tm	Cosmic Rays I
T 14.1–14.9	Mon	16:00–18:15	Tn	Pixel detectors I
T 15.1–15.10	Mon	16:00–18:30	To	Experimental methods I
T 16.1–16.9	Mon	16:00–18:15	Tp	Cosmic Rays V
T 17.1–17.10	Mon	16:00–18:35	Tq	Neutrino Astronomy I
T 18.1–18.9	Mon	16:00–18:20	Tr	Neutrino physics without accelerators I
T 19.1–19.8	Mon	16:00–18:05	Ts	Detector systems I
T 20.1–20.9	Mon	16:00–18:15	Tt	DAQ, trigger and electronics I
T 21.1–21.9	Mon	16:00–18:15	Tu	Data analysis, Information technology I
T 22.1–22.10	Mon	16:00–18:35	Tv	Experimental techniques in astroparticle physics I
T 23.1–23.3	Tue	9:45–12:30	Tb	Hauptvorträge (Invited Talks) I
T 24.1–24.3	Tue	14:00–15:30	Tc	Eingeladene Vorträge (Invited Topical Talks) I
T 25.1–25.3	Tue	14:00–15:30	Td	Eingeladene Vorträge (Invited Topical Talks) II
T 26.1–26.10	Tue	16:00–18:30	Ta	Higgs physics (theory)

T 27.1–27.7	Tue	16:00–17:45	Tb	QCD I
T 28.1–28.10	Tue	16:00–18:30	Tc	Top quark production II
T 29.1–29.8	Tue	16:00–18:05	Td	Top quark decay and top properties I
T 30.1–30.9	Tue	16:00–18:15	Te	Higgs decay in fermions II
T 31.1–31.10	Tue	16:00–18:30	Tf	Flavour physics II
T 32.1–32.10	Tue	16:00–18:30	Tg	Flavour physics VI
T 33.1–33.9	Tue	16:00–18:15	Th	Cosmic Rays VI
T 34.1–34.8	Tue	16:00–18:00	Ti	Extended Higgs models I
T 35.1–35.10	Tue	16:00–18:30	Tj	Semiconductor Detectors - Radiation Hardness, New Materials and Concepts
T 36.1–36.7	Tue	16:00–17:45	Tk	Search for Supersymmetry II
T 37.1–37.9	Tue	16:00–18:15	Tl	Search for New Particles II
T 38.1–38.10	Tue	16:00–18:30	Tm	Data analysis, information technology II
T 39.1–39.10	Tue	16:00–18:35	Tn	Pixel Detectors II
T 40.1–40.10	Tue	16:00–18:30	To	Experimental methods II
T 41.1–41.8	Tue	16:00–18:00	Tp	DAQ, trigger and electronics II
T 42.1–42.10	Tue	16:00–18:30	Tq	Neutrino astronomy II
T 43.1–43.10	Tue	16:00–18:30	Tr	Neutrino physics without accelerators II
T 44.1–44.10	Tue	16:00–18:35	Ts	Neutrino physics without accelerators V
T 45.1–45.10	Tue	16:00–18:30	Tt	Searches for Dark Matter I
T 46.1–46.10	Tue	16:00–18:30	Tu	Cosmic Rays II
T 47.1–47.10	Tue	16:00–18:30	Tv	Experimental techniques in astroparticle physics II
T 48.1–48.3	Wed	9:45–12:30	Tb	Hauptvorträge (Invited Talks) II
T 49.1–49.3	Wed	14:00–15:30	Tc	Eingeladene Vorträge (Invited Topical Talks) III
T 50.1–50.3	Wed	14:00–15:30	Td	Eingeladene Vorträge (Invited Topical Talks) IV
T 51.1–51.10	Wed	16:00–18:30	Ta	BSM physics (theory)
T 52.1–52.8	Wed	16:00–18:00	Tb	Top quark decay and top properties II
T 53.1–53.10	Wed	16:00–18:30	Tc	Electroweak Interactions I
T 54.1–54.10	Wed	16:00–18:30	Td	Cosmic Rays III
T 55.1–55.10	Wed	16:00–18:30	Te	Bosonic and Rare Higgs decays
T 56.1–56.10	Wed	16:00–18:30	Tf	Flavour physics III
T 57.1–57.8	Wed	16:00–18:00	Tg	Calorimeters I
T 58.1–58.9	Wed	16:00–18:25	Th	Gamma astronomy I
T 59.1–59.9	Wed	16:00–18:15	Ti	Extended Higgs models II
T 60.1–60.9	Wed	16:00–18:15	Tj	Silicon Strip Detectors I
T 61.1–61.9	Wed	16:00–18:15	Tk	Search for New Particles III
T 62.1–62.7	Wed	16:00–17:45	Tl	Search for New Particles V
T 63.1–63.8	Wed	16:00–18:00	Tm	Detector Systems II
T 64.1–64.9	Wed	16:00–18:15	Tn	Pixel Detectors III
T 65.1–65.10	Wed	16:00–18:30	To	Experimental methods III
T 66.1–66.9	Wed	16:00–18:15	Tp	DAQ, trigger and electronics III
T 67.1–67.10	Wed	16:00–18:30	Tq	Neutrino astronomy III
T 68.1–68.9	Wed	16:00–18:20	Tr	Neutrino physics without accelerators III
T 69.1–69.10	Wed	16:00–18:35	Ts	Neutrino physics without accelerators VI
T 70.1–70.10	Wed	16:00–18:30	Tt	Searches for Dark Matter II
T 71.1–71.9	Wed	16:00–18:15	Tu	Data analysis, Information technology III
T 72.1–72.10	Wed	16:00–18:30	Tv	Experimental techniques in astroparticle physics III
T 73.1–73.3	Thu	9:45–12:30	Tb	Hauptvorträge (Invited Talks) III
T 74.1–74.3	Thu	14:00–15:30	Tc	Eingeladene Vorträge (Invited Topical Talks) V
T 75.1–75.3	Thu	14:00–15:30	Td	Eingeladene Vorträge (Invited Topical Talks) VI
T 76.1–76.10	Thu	16:00–18:30	Ta	Outreach Methods
T 77.1–77.8	Thu	16:00–18:00	Tb	QCD II
T 78.1–78.9	Thu	16:00–18:15	Tc	Electroweak Interactions II
T 79.1–79.9	Thu	16:00–18:15	Td	Top quark production III
T 80.1–80.10	Thu	16:00–18:35	Te	Cosmic Rays IV
T 81.1–81.10	Thu	16:00–18:30	Tf	Flavour physics IV
T 82.1–82.9	Thu	16:00–18:15	Tg	Calorimeters II
T 83.1–83.10	Thu	16:00–18:35	Th	Gamma astronomy II
T 84.1–84.9	Thu	16:00–18:15	Ti	Associated Higgs production and Higgs quantum numbers II
T 85.1–85.8	Thu	16:00–18:00	Tj	Silicon Strip Detectors II
T 86.1–86.8	Thu	16:00–18:00	Tk	Search for New Particles IV

T 87.1–87.9	Thu	16:00–18:15	Tl	Extended Higgs Models III
T 88.1–88.9	Thu	16:00–18:15	Tm	Detector Systems III
T 89.1–89.8	Thu	16:00–18:00	Tn	Pixel Detectors IV
T 90.1–90.10	Thu	16:00–18:35	To	Muon detectors
T 91.1–91.6	Thu	16:00–17:30	Tp	GRID computing
T 92.1–92.10	Thu	16:00–18:30	Tq	Neutrino astronomy IV
T 93.1–93.10	Thu	16:00–18:30	Tr	Neutrino physics without accelerators IV
T 94.1–94.10	Thu	16:00–18:35	Ts	Neutrino physics without accelerators VII
T 95.1–95.10	Thu	16:00–18:30	Tt	Searches for Dark Matter III
T 96.1–96.7	Thu	16:00–17:45	Tu	DAQ, Trigger and Electronics IV
T 97.1–97.10	Thu	16:00–18:30	Tv	Experimental techniques in astroparticle physics IV
T 98	Thu	19:00–21:00	Ta	General assembly - Particle Physics Division (for DPG members)
T 99.1–99.3	Fri	9:45–12:30	Tb	Hauptvorträge (Invited Talks) IV

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

Thursday 19:00–21:00 Ta

- Report: Division Particle Physics and Section Matter and Cosmos
- Decision to be taken: Enlargement of DPG Section Matter and Cosmos (SMuK) by Division Plasma Physics?
- Election: chair and vice chair of Division Particle Physics for period June 1, 2021 - May 31, 2023.
- Decision to be taken: Future meeting venues (in particular in 2025)
- General Discussion: Format of spring meeting in 2021 and in the future
- AOB