

Particle Physics Division Fachverband Teilchenphysik (T)

Johannes Haller
Universität Hamburg
Institut für Experimentalphysik
Luruper Chaussee 149
22761 Hamburg
johannes.haller@uni-hamburg.de

Overview of Invited Talks and Sessions

Plenary, Ceremonial, and Evening Talks

PV I	Mon	14:00–14:45	Geb. 30.95: Audimax	Overview and perspectives in LHC physics — ●MARUMI KADO
PV II	Tue	11:00–13:00	Geb. 30.95: Audimax	Twenty years of ultra-high-energy cosmic-ray physics with the Pierre Auger Observatory — ●RALPH ENGEL
PV III	Tue	19:30–20:30	Geb. 30.95: Audimax	Dem unsichtbaren Universum auf der Spur: Neutrinos und Dunkle Materie — ●KATHRIN VALERIUS
PV IV	Wed	11:00–13:00	Geb. 30.95: Audimax	Particle Physics Through the Ages: A Century of Discoveries and the Road Ahead — ●BEATE HEINEMANN
PV V	Fri	11:00–11:45	Geb. 30.95: Audimax	Highlights of Neutrino Physics — ●SUSANNE MERTENS

Invited Overview Talks

T 1.1	Mon	14:45–15:15	Geb. 30.95: Audimax	Evidence for a gravitational-wave background at nanohertz frequencies — ●KAI SCHMITZ
T 24.1	Tue	9:00– 9:30	Geb. 30.95: Audimax	Latest results of the LHCb experiment — ●DOMINIK STEFAN MITZEL
T 24.2	Tue	9:30–10:00	Geb. 30.95: Audimax	Belle II at the start of Run2 and physics highlights — ●CARSTEN NIEBUHR
T 24.3	Tue	10:00–10:30	Geb. 30.95: Audimax	Overview of the ECFA Detector R&D Roadmap and status of the implementation of its recommendations — ●SUSANNE KUEHN
T 25.1	Tue	11:45–12:15	Geb. 30.95: Audimax	Extensive air shower simulations – successes and challenges — ●TIM HUEGE
T 25.2	Tue	12:15–12:45	Geb. 30.95: Audimax	The muon anomalous magnetic moment — ●CHRISTOPH LEHNER
T 51.1	Wed	9:00– 9:30	Geb. 30.95: Audimax	The top quark: a precision probe and a window to new phenomena — ●JAN KIESELER
T 51.2	Wed	9:30–10:00	Geb. 30.95: Audimax	Fundamental tests of the Standard Model at ATLAS and CMS — ●BAPTISTE RAVINA
T 51.3	Wed	10:00–10:30	Geb. 30.95: Audimax	Mastering challenges of High-Luminosity LHC data with innovative computing solutions — ●MICHAEL BOEHLER
T 76.1	Thu	9:00– 9:30	Geb. 30.95: Audimax	Origin of heavy elements: r-process in neutron star mergers and core-collapse supernovae — ●ALMUDENA ARCONES
T 76.2	Thu	9:30–10:00	Geb. 30.95: Audimax	Radio Detection of Neutrinos — ●ANNA NELLES
T 76.3	Thu	10:00–10:30	Geb. 30.95: Audimax	High precision gravitational wave physics from quantum field theory — ●JAN PLEFKA
T 127.1	Fri	11:45–12:15	Geb. 30.95: Audimax	Status and Highlights of Higgs Boson Measurements and Searches at the LHC — ●MARCEL RIEGER
T 127.2	Fri	12:15–12:45	Geb. 30.95: Audimax	Charting the unknown: results from recent searches for new phenomena at the LHC — ●KATHARINA BEHR

Invited Topical Talks

T 26.1	Tue	14:00–14:30	Geb. 30.21: Gerthsen-HS	New physics searches through the Higgs and atomic windows — ●ELINA FUCHS
T 26.2	Tue	14:30–15:00	Geb. 30.21: Gerthsen-HS	Study of electroweak interactions via vector boson scattering at the ATLAS detector — ●GIA KHORIAULI
T 26.3	Tue	15:00–15:30	Geb. 30.21: Gerthsen-HS	AI-aided searches for new physics — ●BENEDIKT MAIER
T 27.1	Tue	14:00–14:30	Geb. 30.22: Gaede-HS	Start up of Run 3 and performance of the upgraded LHCb experiment — ●ELENA DALL’OCCO
T 27.2	Tue	14:30–15:00	Geb. 30.22: Gaede-HS	Fully-inclusive measurement of $B^{0,\pm} \rightarrow XJ/\psi$ processes at Belle II — ●SVIATOSLAV BILOKIN
T 27.3	Tue	15:00–15:30	Geb. 30.22: Gaede-HS	Probing Axion Dark Matter with Flavor Factories — ●ROBERT ZIEGLER
T 77.1	Thu	11:00–11:30	Geb. 30.21: Gerthsen-HS	Track reconstruction for the ATLAS Phase-II Event Filter using GNNs on FPGAs — ●SEBASTIAN DITTMEIER
T 77.2	Thu	11:30–12:00	Geb. 30.21: Gerthsen-HS	Searches for Long-Lived Particles at LHC — ●LISA BENATO
T 77.3	Thu	12:00–12:30	Geb. 30.21: Gerthsen-HS	Searches for long-lived particles at accelerators — ●MAKSYM OVCHYNNIKOV
T 78.1	Thu	11:00–11:30	Geb. 30.22: Gaede-HS	Signatures of quantum gravity in neutrino telescopes — ●ALBA DOMI
T 78.2	Thu	11:30–12:00	Geb. 30.22: Gaede-HS	Development, characterization, and integration of the Silicon Drift Detector array TRISTAN for KATRIN — ●FRANK EDZARDS
T 78.3	Thu	12:00–12:30	Geb. 30.22: Gaede-HS	New Chapter in Neutrino Physics with JUNO — ●YURY MALYSHKIN
T 79.1	Thu	14:00–14:30	Geb. 30.21: Gerthsen-HS	Construction, Commissioning, and Performance of the new ATLAS Level1-Trigger System for Run 3 — ●RALF GUGEL
T 79.2	Thu	14:30–15:00	Geb. 30.21: Gerthsen-HS	Hadronic signals at the LHC: timing as a handle to face the challenges of higher luminosity — ●MARGHERITA SPALLA
T 79.3	Thu	15:00–15:30	Geb. 30.21: Gerthsen-HS	The LHCb Mighty Tracker - Getting ready for flavour physics at the HL-LHC — ●KLAAS PADEKEN
T 80.1	Thu	14:00–14:30	Geb. 30.22: Gaede-HS	The advent of TeV gamma-ray astronomy with gamma-ray bursts — ●ALESSIO BERTI
T 80.2	Thu	14:30–15:00	Geb. 30.22: Gaede-HS	Multi-messenger models of active galaxies: achievements and future directions — ●XAVIER RODRIGUES
T 80.3	Thu	15:00–15:30	Geb. 30.22: Gaede-HS	Acceleration and transport of relativistic electrons in the parsec-scale jets of the microquasar SS 433 — ●LAURA OLIVERA-NIETO

Invited Talks of the joint Symposium Future

SYFU 1.1	Wed	14:00–14:30	Geb. 30.95: Audimax	Future in Collisions – The need for an e^+e^- Higgs Factory — ●JÜRGEN REUTER
SYFU 1.2	Wed	14:30–15:00	Geb. 30.95: Audimax	Exploring the Gravitational Wave Universe with the Einstein Telescope and LISA — ●KATHARINA-SOPHIE ISLEIF, THE ET COLLABORATION, THE LISA CONSORTIUM, THE LVK COLLABORATION
SYFU 1.3	Wed	15:00–15:30	Geb. 30.95: Audimax	Sustainable Partnerships: Navigating the Environmental Challenges in Modern Particle and Astroparticle Physics — ●MICHAEL DÜREN

Sessions

T 1.1–1.1	Mon	14:45–15:15	Geb. 30.95: Audimax	Invited Overview Talks 1
T 2.1–2.8	Mon	16:00–18:00	Geb. 20.30: 1.067	Search for new particles 1 (LHC)
T 3.1–3.8	Mon	16:00–18:00	Geb. 20.30: 2.058	Search for new particles 2
T 4.1–4.8	Mon	16:00–18:00	Geb. 20.30: 2.059	Cosmic rays 1

T 5.1–5.7	Mon	16:00–17:45	Geb. 20.30: 2.066	Methods in particle physics 1 (e/gamma, SciFi)
T 6.1–6.8	Mon	16:00–18:00	Geb. 20.30: 2.067	Methods in astroparticle physics 1
T 7.1–7.8	Mon	16:00–18:00	Geb. 30.21: Gerthsen-HS	Neutrino physics 1
T 8.1–8.8	Mon	16:00–18:00	Geb. 30.22: Gaede-HS	Neutrino physics 2
T 9.1–9.8	Mon	16:00–18:00	Geb. 30.22: Lehmann-HS	Cosmic rays 2
T 10.1–10.8	Mon	16:00–18:00	Geb. 30.22: kl. HS A	Gamma astronomy 1
T 11.1–11.8	Mon	16:00–18:00	Geb. 30.22: kl. HS B	Silicon trackers 1
T 12.1–12.7	Mon	16:00–17:45	Geb. 30.23: 2/1	Detectors 1 (electronics)
T 13.1–13.8	Mon	16:00–18:00	Geb. 30.23: 2/17	Detectors 2 (scintillators, other)
T 14.1–14.7	Mon	16:00–17:45	Geb. 30.23: 3/1	Detectors 3 (muon detectors)
T 15.1–15.8	Mon	16:00–18:00	Geb. 30.23: 6/1	Neutrino astronomy 1
T 16.1–16.8	Mon	16:00–18:00	Geb. 30.33: MTI	Data, AI, Computing 1 (anomaly detection)
T 17.1–17.8	Mon	16:00–18:00	Geb. 30.34: LTI	Data, AI, Computing 2 (analysis tools)
T 18.1–18.7	Mon	16:00–17:45	Geb. 30.35: HSI	Search for Dark Matter 1
T 19.1–19.8	Mon	16:00–18:00	Geb. 30.41: HS 1	Methods in particle physics 2 (alignment, luminosity)
T 20.1–20.7	Mon	16:00–17:45	Geb. 30.41: HS 2	Higgs 1 (boson final states)
T 21.1–21.8	Mon	16:00–18:00	Geb. 30.41: HS 3	BSM Higgs 1 (extended Higgs sectors)
T 22.1–22.8	Mon	16:00–18:00	Geb. 30.41: HS 4	Flavour physics 1
T 23.1–23.9	Mon	16:00–18:15	Geb. 30.95: Audimax	Top physics 1
T 24.1–24.3	Tue	9:00–10:30	Geb. 30.95: Audimax	Invited Overview Talks 2
T 25.1–25.2	Tue	11:45–12:45	Geb. 30.95: Audimax	Invited Overview Talks 3
T 26.1–26.3	Tue	14:00–15:30	Geb. 30.21: Gerthsen-HS	Invited Topical Talks 1
T 27.1–27.3	Tue	14:00–15:30	Geb. 30.22: Gaede-HS	Invited Topical Talks 2
T 28.1–28.8	Tue	16:00–18:00	Geb. 20.30: 1.067	Search for new particles 3 (ALPS)
T 29.1–29.8	Tue	16:00–18:00	Geb. 20.30: 2.058	Neutrino physics 3
T 30.1–30.7	Tue	16:00–17:45	Geb. 20.30: 2.059	Cosmic rays 3
T 31.1–31.8	Tue	16:00–18:00	Geb. 20.30: 2.066	Methods in particle physics 3 (lepton reconstruction)
T 32.1–32.8	Tue	16:00–18:00	Geb. 20.30: 2.067	Methods in astroparticle physics 2
T 33.1–33.8	Tue	16:00–18:00	Geb. 30.21: Gerthsen-HS	Neutrino physics 4
T 34.1–34.8	Tue	16:00–18:00	Geb. 30.22: Gaede-HS	Neutrino physics 5
T 35.1–35.8	Tue	16:00–18:00	Geb. 30.22: Lehmann-HS	Cosmic rays 4
T 36.1–36.8	Tue	16:00–18:00	Geb. 30.22: kl. HS A	Gamma astronomy 2
T 37.1–37.8	Tue	16:00–18:00	Geb. 30.22: kl. HS B	Silicon trackers 2
T 38.1–38.8	Tue	16:00–18:00	Geb. 30.23: 2/0	Standard model 1 (electroweak/bosons)
T 39.1–39.8	Tue	16:00–18:00	Geb. 30.23: 2/1	Detectors 4 (calorimeters)
T 40.1–40.8	Tue	16:00–18:00	Geb. 30.23: 2/17	Detectors 5 (scintillators)
T 41.1–41.8	Tue	16:00–18:00	Geb. 30.23: 3/1	Trigger+DAQ 1
T 42.1–42.8	Tue	16:00–18:00	Geb. 30.23: 6/1	Neutrino astronomy 2
T 43.1–43.9	Tue	16:00–18:15	Geb. 30.33: MTI	Data, AI, Computing 3 (pointclouds & graphs)
T 44.1–44.8	Tue	16:00–18:00	Geb. 30.34: LTI	Data, AI, Computing 4 (workflow)
T 45.1–45.8	Tue	16:00–18:00	Geb. 30.35: HSI	Search for Dark Matter 2
T 46.1–46.8	Tue	16:00–18:00	Geb. 30.41: HS 1	Di-Higgs 1 ($bb\tau\tau$)
T 47.1–47.8	Tue	16:00–18:00	Geb. 30.41: HS 2	Higgs 2 (ttH & tH production)
T 48.1–48.7	Tue	16:00–17:45	Geb. 30.41: HS 3	BSM Higgs 2 (extended Higgs sectors)
T 49.1–49.9	Tue	16:00–18:15	Geb. 30.41: HS 4	Flavour physics 2
T 50.1–50.9	Tue	16:00–18:15	Geb. 30.95: Audimax	Top physics 2 (top pair cross section)
T 51.1–51.3	Wed	9:00–10:30	Geb. 30.95: Audimax	Invited Overview Talks 4
T 52.1–52.8	Wed	16:00–18:00	Geb. 20.30: 1.067	Search for new particles 4 (leptoquarks, LHC)
T 53.1–53.8	Wed	16:00–18:00	Geb. 20.30: 2.058	Neutrino physics 6
T 54.1–54.8	Wed	16:00–18:00	Geb. 20.30: 2.059	Cosmic rays 5
T 55.1–55.7	Wed	16:00–17:45	Geb. 20.30: 2.066	Methods in particle physics 4 (HCAL, jets)
T 56.1–56.8	Wed	16:00–18:00	Geb. 20.30: 2.067	Methods in astroparticle physics 3
T 57.1–57.8	Wed	16:00–18:00	Geb. 30.21: Gerthsen-HS	Neutrino physics 7
T 58.1–58.8	Wed	16:00–18:00	Geb. 30.22: Gaede-HS	Neutrino physics 8
T 59.1–59.5	Wed	16:00–17:15	Geb. 30.22: Lehmann-HS	Outreach 1
T 60.1–60.8	Wed	16:00–18:00	Geb. 30.22: kl. HS A	Gamma astronomy 3
T 61.1–61.8	Wed	16:00–18:00	Geb. 30.22: kl. HS B	Silicon trackers 3
T 62.1–62.8	Wed	16:00–18:00	Geb. 30.23: 2/0	Standard model 2 (electroweak/bosons)
T 63.1–63.7	Wed	16:00–17:45	Geb. 30.23: 2/1	Detectors 6 (calorimeters)

T 64.1–64.7	Wed	16:00–17:45	Geb. 30.23: 2/17	Detectors 7 (gas detectors)
T 65.1–65.8	Wed	16:00–18:00	Geb. 30.23: 3/1	Trigger+DAQ 2
T 66.1–66.8	Wed	16:00–18:00	Geb. 30.23: 6/1	Neutrino astronomy 3
T 67.1–67.7	Wed	16:00–17:45	Geb. 30.33: MTI	Data, AI, Computing 5 (normalising flows)
T 68.1–68.8	Wed	16:00–18:00	Geb. 30.34: LTI	Data, AI, Computing 6 (ML utilities)
T 69.1–69.7	Wed	16:00–17:45	Geb. 30.35: HSI	Search for Dark Matter 3
T 70.1–70.7	Wed	16:00–17:45	Geb. 30.41: HS 1	Di-Higgs 2 (4b & other)
T 71.1–71.8	Wed	16:00–18:00	Geb. 30.41: HS 2	Higgs 3 (coupling to b and c quarks)
T 72.1–72.7	Wed	16:00–17:45	Geb. 30.41: HS 3	BSM Higgs 3 (extended Higgs sectors)
T 73.1–73.8	Wed	16:00–18:00	Geb. 30.41: HS 4	Flavour physics 3
T 74.1–74.7	Wed	16:00–17:45	Geb. 30.95: Audimax	Top physics 3 (single top)
T 75.1–75.1	Wed	19:45–21:30	Geb. 30.22: Gaede-HS	Annual Meeting of Young Scientists in High Energy Physics (yHEP)
T 76.1–76.3	Thu	9:00–10:30	Geb. 30.95: Audimax	Invited Overview Talks 5
T 77.1–77.3	Thu	11:00–12:30	Geb. 30.21: Gerthsen-HS	Invited Topical Talks 3
T 78.1–78.3	Thu	11:00–12:30	Geb. 30.22: Gaede-HS	Invited Topical Talks 4
T 79.1–79.3	Thu	14:00–15:30	Geb. 30.21: Gerthsen-HS	Invited Topical Talks 5
T 80.1–80.3	Thu	14:00–15:30	Geb. 30.22: Gaede-HS	Invited Topical Talks 6
T 81.1–81.7	Thu	16:00–17:45	Geb. 20.30: 1.067	Search for new particles 5 (SUSY)
T 82.1–82.8	Thu	16:00–18:00	Geb. 20.30: 2.058	Neutrino physics 9
T 83.1–83.9	Thu	16:00–18:15	Geb. 20.30: 2.059	Cosmic rays 6
T 84.1–84.8	Thu	16:00–18:00	Geb. 20.30: 2.066	Methods in particle physics 5 (tagging)
T 85.1–85.8	Thu	16:00–18:00	Geb. 20.30: 2.067	Methods in astroparticle physics 4
T 86.1–86.8	Thu	16:00–18:00	Geb. 30.21: Gerthsen-HS	Neutrino physics 10
T 87.1–87.8	Thu	16:00–18:00	Geb. 30.22: Gaede-HS	Neutrino physics 11
T 88.1–88.6	Thu	16:00–17:30	Geb. 30.22: Lehmann-HS	Outreach 2
T 89.1–89.8	Thu	16:00–18:00	Geb. 30.22: kl. HS A	Gamma astronomy 4
T 90.1–90.8	Thu	16:00–18:00	Geb. 30.22: kl. HS B	Silicon trackers 4
T 91.1–91.8	Thu	16:00–18:00	Geb. 30.23: 2/0	Standard model 3 (strong/QCD)
T 92.1–92.7	Thu	16:00–17:45	Geb. 30.23: 2/1	Detectors 8 (semiconductors)
T 93.1–93.7	Thu	16:00–17:45	Geb. 30.23: 2/17	Detectors 9 (gas detectors)
T 94.1–94.7	Thu	16:00–17:45	Geb. 30.23: 3/1	Trigger+DAQ 3
T 95.1–95.8	Thu	16:00–18:00	Geb. 30.23: 6/1	Gravitational waves 1
T 96.1–96.9	Thu	16:00–18:15	Geb. 30.33: MTI	Data, AI, Computing 7 (uncertainties, likelihoods)
T 97.1–97.8	Thu	16:00–18:00	Geb. 30.34: LTI	Future colliders
T 98.1–98.6	Thu	16:00–17:30	Geb. 30.35: HSI	Search for Dark Matter 4
T 99.1–99.6	Thu	16:00–17:30	Geb. 30.41: HS 1	Di-Higgs 3 (bbWW)
T 100.1–100.8	Thu	16:00–18:00	Geb. 30.41: HS 2	Higgs 4 (coupling to taus, CP, rare decays)
T 101.1–101.8	Thu	16:00–18:00	Geb. 30.41: HS 3	BSM Higgs 4
T 102.1–102.8	Thu	16:00–18:00	Geb. 30.41: HS 4	Flavour physics 4
T 103.1–103.8	Thu	16:00–18:00	Geb. 30.95: Audimax	Top physics 4 (tt+X)
T 104	Thu	19:00–20:00	Geb. 30.22: Lehmann-HS	Members' Assembly
T 105.1–105.6	Fri	9:00–10:30	Geb. 20.30: 1.067	Search for new particles 6
T 106.1–106.5	Fri	9:00–10:15	Geb. 20.30: 2.058	Search for new particles 7
T 107.1–107.6	Fri	9:00–10:30	Geb. 20.30: 2.059	Cosmic rays 7
T 108.1–108.6	Fri	9:00–10:30	Geb. 20.30: 2.066	Methods in particle physics 6
T 109.1–109.6	Fri	9:00–10:30	Geb. 30.21: Gerthsen-HS	Neutrino physics 12
T 110.1–110.6	Fri	9:00–10:30	Geb. 30.22: Gaede-HS	Search for Dark Matter 5
T 111.1–111.6	Fri	9:00–10:30	Geb. 30.22: Lehmann-HS	Outreach 3
T 112.1–112.6	Fri	9:00–10:30	Geb. 30.22: kl. HS A	Silicon trackers 5
T 113.1–113.6	Fri	9:00–10:30	Geb. 30.22: kl. HS B	Silicon trackers 6
T 114.1–114.6	Fri	9:00–10:30	Geb. 30.23: 2/0	Standard model 4 (strong/QCD)
T 115.1–115.6	Fri	9:00–10:30	Geb. 30.23: 2/1	Detectors 10 (semiconductors)
T 116.1–116.6	Fri	9:00–10:30	Geb. 30.23: 2/17	Detectors 11 (gas detectors)
T 117.1–117.6	Fri	9:00–10:30	Geb. 30.23: 3/1	Trigger+DAQ 4
T 118.1–118.4	Fri	9:00–10:00	Geb. 30.23: 6/1	Gravitational waves 2
T 119.1–119.5	Fri	9:00–10:15	Geb. 30.33: MTI	Data, AI, Computing 8 (foundational & transformer models)
T 120.1–120.6	Fri	9:00–10:30	Geb. 30.34: LTI	Data, AI, Computing 9 (generative models & simulation)

T 121.1–121.6	Fri	9:00–10:30	Geb. 30.35: HSI	Search for Dark Matter 6
T 122.1–122.5	Fri	9:00–10:15	Geb. 30.41: HS 1	Miscellaneous
T 123.1–123.6	Fri	9:00–10:30	Geb. 30.41: HS 2	Flavour physics 5
T 124.1–124.5	Fri	9:00–10:15	Geb. 30.41: HS 3	BSM Higgs 5 (charged Higgs bosons)
T 125.1–125.6	Fri	9:00–10:30	Geb. 30.41: HS 4	Flavour physics 6
T 126.1–126.5	Fri	9:00–10:15	Geb. 30.95: Audimax	Top physics 5 (top mass)
T 127.1–127.2	Fri	11:45–12:45	Geb. 30.95: Audimax	Invited Overview Talks 6

Members' Assembly of the Particle Physics Division

Thursday 19:00–20:00 Geb. 30.22: Lehmann-HS