Particle Physics Division
Fachverband Teilchenphysik (T)

Kerstin Borras
Deutsches Elektronen-Synchrotron DESY and RWTH Aachen University
Notkestraße 85
22607 Hamburg
kerstin.borras@desy.de

Overview of Invited Talks and Sessions

(Lecture halls HSZ/AUDI, HSZ/0003, HSZ/0004, HSZ/0101, HSZ/0103, HSZ/0105, HSZ/0201, HSZ/0204, HSZ/0301, HSZ/0304, HSZ/0401, HSZ/0403, HSZ/0405, POT/0051, POT/0151, POT/0251, POT/0361, POT/0006, POT/0112, POT/0013, POT/0351, POT/0106, WIL/A317, WIL/A124, WIL/C133, WIL/A120, and WIL/C129)

Invited Talks

T 1.1	Mon	11:00–11:30	HSZ/AUDI	**What we learned about the Higgs Boson from the LHC so far** — •Duc Bao Ta
T 1.2	Mon	11:30–12:00	HSZ/AUDI	**QCD at the LHC – Precision for Discoveries** — •Malgorzata Worek
T 1.3	Mon	12:00–12:30	HSZ/AUDI	**The charm and beauty of flavour physics** — •Marco Gersabeck
T 24.1	Tue	11:00–11:30	HSZ/AUDI	**Searching for Long-Lived Particles at the LHC and Beyond** — •Juliette Alimena
T 24.2	Tue	11:30–12:00	HSZ/AUDI	**The Neutrino-Dawn of Galaxies** — •Wolfgang Rhode
T 24.3	Tue	12:00–12:30	HSZ/AUDI	**Galactic cosmic rays: What have we learned and what's next?** — •Philipp Mertsch
T 100.1	Thu	11:00–11:30	HSZ/AUDI	**AI Techniques for Event Reconstruction** — •Ivan Kisel
T 100.2	Thu	11:30–12:00	HSZ/AUDI	**Accelerator operation optimisation using machine learning** — •Pierre Schnizer
T 100.3	Thu	12:00–12:30	HSZ/AUDI	**Is this even physics? – Progress on AI in particle physics** — •Gregor Kasieczka
T 153.1	Fri	11:00–11:30	HSZ/AUDI	**The Standard Model on the test bench: What bosons and the top quark (will) tell us** — •Valerie Lang
T 153.2	Fri	11:30–12:00	HSZ/AUDI	**Gravitational wave observations: Current results & future expectations** — •Harald Pfeiffer
T 153.3	Fri	12:00–12:30	HSZ/AUDI	**Precise muon detection: novel technologies for the luminosity frontier** — •Kerstin Hoepfner
T 154.1	Fri	13:30–14:00	HSZ/AUDI	**ECN3: Experimental Opportunities at a Future High-Intensity Proton Facility at the CERN SPS (BDF/SHiP and HIKE+SHADOWS)** — •Annika Hollnagel

Invited Topical Talks

T 50.1	Wed	11:00–11:20	HSZ/AUDI	**Search for leptoquarks at the ATLAS experiment** — •Mahsana Haleem
T 50.2	Wed	11:20–11:40	HSZ/AUDI	**Making the most of Yukawa couplings: searching for Dark Matter accompanied by heavy quarks** — •Danyer Perez Adan
T 50.3	Wed	11:40–12:00	HSZ/AUDI	**Precision predictions for transverse momentum distributions of Higgs and vector bosons at the LHC** — •Maximilian Stahlhofen
T 50.4	Wed	12:00–12:20	HSZ/AUDI	**Axion fragmentation** — •Enrico Morgante
T 51.1	Wed	11:00–11:20	HSZ/0003	**LUXE – A new experiment to study non-perturbative QED in electron-laser and photon-laser collisions** — •Ruth Jacobs
T 51.2	Wed	11:20–11:40	HSZ/0003	**Precision timing with silicon sensors** — •Annika Vauth

T 51.3	Wed	11:40–12:00	HSZ/0003	**Recent advancements in Micro-Pattern Gaseous Detectors: Exciting research ahead towards future experiments** — •Michael Lupberger
T 51.4	Wed	12:00–12:20	HSZ/0003	**Recent Liquid Scintillator Developments for Astroparticle Physics** — •Stefan Schoppmann
T 52.1	Wed	14:00–14:20	HSZ/AUDI	**Commissioning of the new LHCb trigger system** — •Marian Stahl
T 52.2	Wed	14:20–14:40	HSZ/AUDI	**Alignment of the CMS Tracker: Automation is Key** — •Marius Teroerde
T 52.3	Wed	14:40–15:00	HSZ/AUDI	**ITk – ATLAS tracker upgrade** — •Dennis Sperlich
T 52.4	Wed	15:00–15:20	HSZ/AUDI	**Role of simulation in silicon tracker sensors R&D** — •Anastasiia Velyka
T 53.1	Wed	14:00–14:20	HSZ/0003	**LST-1: Initial scientific results from the first CTA telescope** — •Dominik Elsaesser
T 53.2	Wed	14:20–14:40	HSZ/0003	**Multimessenger astronomy with the Pierre Auger Obser- vatory** — •Marcus Niechciol
T 53.3	Wed	14:40–15:00	HSZ/0003	**Positron annihilation as an astrophysical messenger** — •Thomas Siegert
T 53.4	Wed	15:00–15:20	HSZ/0003	**The first results of the XENONnT experiment and an outlook to the future DARWIN observatory** — •Andrii Terliuk
T 101.1	Thu	14:00–14:20	HSZ/0003	**How to Study the Higgs Boson in its Bosonic Decays** — •Benedict Winter
T 101.2	Thu	14:20–14:40	HSZ/0003	**Measuring $H \to WW$ with the ATLAS Experiment** — •Carsten Burgard
T 101.3	Thu	14:40–15:00	HSZ/0003	**Belle II opportunities in B-decays with invisible signatures** — •Slavomira Stefkova
T 101.4	Thu	15:00–15:20	HSZ/0003	**Two Pieces of a Puzzle: Inclusive and Exclusive $\|\mathbf{V_{cb}}\|$** — •Markus Prim
T 102.1	Thu	14:00–14:20	HSZ/0004	**Expanding the Frontiers of Galactic Neutrino Astronomy via Machine Learning*** — •Mirco Hünnefeld
T 102.2	Thu	14:20–14:40	HSZ/0004	**Enhancing the CMS Level-1 Trigger with real-time Machine Learning** — •Artur Lobanov
T 102.3	Thu	14:40–15:00	HSZ/0004	**Higgsino Hunting at ATLAS** — •Michael Holzbock
T 102.4	Thu	15:00–15:20	HSZ/0004	**New Ideas for Baryo- and Leptogenesis** — •Kai Schmitz

Sessions

T 1.1–1.3	Mon	11:00–12:30	HSZ/AUDI	**Invited Overview Talks I**
T 2.1–2.6	Mon	16:30–18:00	HSZ/0004	**Flavor I**
T 3.1–3.6	Mon	16:30–18:00	HSZ/0401	**Top I**
T 4.1–4.6	Mon	16:30–18:00	HSZ/0403	**Searches I**
T 5.1–5.6	Mon	16:30–18:00	HSZ/0101	**Higgs Searches**
T 6.1–6.6	Mon	16:30–18:00	HSZ/0103	**Other Exp., EW**
T 7.1–7.6	Mon	16:30–18:00	HSZ/0105	**Higgs, Di-Higgs I**
T 8.1–8.6	Mon	16:30–18:00	HSZ/0204	**Outreach Public/Teilchenwelt (joint session T/HK)**
T 9.1–9.6	Mon	16:30–18:00	HSZ/0301	**DAQ NN/ML – HW**
T 10.1–10.6	Mon	16:30–18:00	HSZ/0405	**ML Methods I**
T 11.1–11.6	Mon	16:30–18:00	POT/0051	**Neutrinos, Dark Matter I**
T 12.1–12.6	Mon	16:30–18:00	POT/0151	**Gamma Astronomy I**
T 13.1–13.6	Mon	16:30–18:00	POT/0251	**Neutrinos I**
T 14.1–14.6	Mon	16:30–18:00	POT/0361	**Neutrinos, Dark Matter II**
T 15.1–15.6	Mon	16:30–18:00	POT/0006	**Neutrinos, Dark Matter III**
T 16.1–16.6	Mon	16:30–18:00	POT/0112	**Neutrino Astronomy I**
T 17.1–17.6	Mon	16:30–18:00	POT/0013	**Cosmic Ray I**
T 18.1–18.6	Mon	16:30–18:00	POT/0351	**Exp. Methods, CTA, others**
T 19.1–19.5	Mon	16:30–17:45	POT/0106	**Detector Systems, Electronics**
T 20.1–20.5	Mon	16:30–17:45	WIL/A317	**Pixel ITk, Si-Strips/Other**
T 21.1–21.6	Mon	16:30–18:00	WIL/A124	**Si-Strips/CMS, Pixel/Sensor**
T 22.1–22.6	Mon	16:30–18:00	WIL/C133	**Calorimeter / Detector Systems I**
T 23.1–23.6	Mon	16:30–18:00	WIL/A120	**Gas-Detectors / Muon MDT**

T 24.1–24.3	Tue	11:00–12:30	HSZ/AUDI	**Invited Overview Talks II**
T 25.1–25.6	Tue	17:00–18:30	HSZ/0304	**Flavor II**
T 26.1–26.6	Tue	17:00–18:30	HSZ/0401	**Flavor III**
T 27.1–27.6	Tue	17:00–18:30	HSZ/0403	**Searches II**
T 28.1–28.6	Tue	17:00–18:30	HSZ/0101	**Forward Physics**
T 29.1–29.6	Tue	17:00–18:30	HSZ/0103	**Other Exp., EW**
T 30.1–30.6	Tue	17:00–18:30	HSZ/0105	**Higgs Charm, Di-Higgs**
T 31.1–31.5	Tue	17:00–18:15	HSZ/0201	**Theory Higgs, BMS**
T 32.1–32.6	Tue	17:00–18:30	HSZ/0204	**Di-Higgs, Higgs BSM**
T 33.1–33.6	Tue	17:00–18:30	HSZ/0301	**DAQ NN/ML – GRID I**
T 34.1–34.6	Tue	17:00–18:30	HSZ/0405	**ML Methods II**
T 35.1–35.6	Tue	17:00–18:30	POT/0051	**Neutrino Astronomy II**
T 36.1–36.6	Tue	17:00–18:30	POT/0151	**Gamma Astronomy II**
T 37.1–37.6	Tue	17:00–18:30	POT/0251	**Neutrinos, Dark Matter IV**
T 38.1–38.6	Tue	17:00–18:30	POT/0361	**Neutrinos, Dark Matter V**
T 39.1–39.6	Tue	17:00–18:30	POT/0006	**Neutrinos, Dark Matter VI**
T 40.1–40.4	Tue	17:00–18:00	POT/0112	**Astro Particle Theory**
T 41.1–41.6	Tue	17:00–18:30	POT/0013	**Cosmic Ray II**
T 42.1–42.6	Tue	17:00–18:30	POT/0351	**Exp. Methods, IceAct, Auger, RNO-G**
T 43.1–43.6	Tue	17:00–18:30	POT/0106	**Electronics, DAQ, Exp. Methods**
T 44.1–44.6	Tue	17:00–18:30	WIL/A317	**Pixel/LHCb, Si-Strips/CMS**
T 45.1–45.6	Tue	17:00–18:30	WIL/A124	**Si-Strips, Pixel**
T 46.1–46.6	Tue	17:00–18:30	WIL/C133	**Calorimeter / Detector Systems II**
T 47.1–47.6	Tue	17:00–18:30	WIL/A120	**Gas-Detecors, Detector Systems**
T 48.1–48.5	Tue	17:00–18:15	WIL/C129	**Exp. Methods I**
T 49.1–49.7	Tue	17:00–18:45	SCH/A252	**Outreach (joint session HK/T)**
T 50.1–50.4	Wed	11:00–12:20	HSZ/AUDI	**Invited Topical Talks I-A**
T 51.1–51.4	Wed	11:00–12:20	HSZ/0003	**Invited Topical Talks I-B**
T 52.1–52.4	Wed	14:00–15:20	HSZ/AUDI	**Invited Topical Talks II-A**
T 53.1–53.4	Wed	14:00–15:20	HSZ/0003	**Invited Topical Talks II-B**
T 54.1–54.6	Wed	15:50–17:20	HSZ/0304	**Flavor IV**
T 55.1–55.6	Wed	15:50–17:20	HSZ/0401	**Flavor V, Top-BSM**
T 56.1–56.6	Wed	15:50–17:20	HSZ/0403	**Searches EW I**
T 57.1–57.6	Wed	15:50–17:20	HSZ/0101	**Single Top – Higgs Top**
T 58.1–58.6	Wed	15:50–17:20	HSZ/0103	**Other Exp., $t\bar{t}$**
T 59.1–59.6	Wed	15:50–17:20	HSZ/0105	**QCD Theory and Experiment I**
T 60.1–60.5	Wed	15:50–17:05	HSZ/0201	**Theory BMS**
T 61.1–61.6	Wed	15:50–17:20	HSZ/0204	**Higgs I**
T 62.1–62.6	Wed	15:50–17:20	HSZ/0301	**DAQ NN/ML – GRID II**
T 63.1–63.6	Wed	15:50–17:20	HSZ/0405	**ML Methods III**
T 64.1–64.6	Wed	15:50–17:20	POT/0051	**Neutrino Astronomy III**
T 65.1–65.4	Wed	15:50–16:50	POT/0151	**Gamma Astronomy III**
T 66.1–66.6	Wed	15:50–17:20	POT/0251	**Neutrinos II**
T 67.1–67.4	Wed	15:50–16:50	POT/0361	**Neutrinos, Dark Matter VII**
T 68.1–68.4	Wed	15:50–16:50	POT/0006	**Neutrinos, Dark Matter VIII**
T 69.1–69.5	Wed	15:50–17:05	POT/0112	**Neutrinos, Dark Matter IX**
T 70.1–70.6	Wed	15:50–17:20	POT/0013	**Cosmic Ray III**
T 71.1–71.6	Wed	15:50–17:20	POT/0351	**Exp. Methods AP, PMTs**
T 72.1–72.5	Wed	15:50–17:05	POT/0106	**Exp. Methods II**
T 73.1–73.4	Wed	15:50–16:50	WIL/A317	**Pixel/CMS**
T 74.1–74.4	Wed	15:50–16:50	WIL/A124	**DetSys MAGIX, DetSys KATRIN**
T 75.1–75.3	Wed	15:50–16:35	WIL/C133	**Calorimeter / Detector Systems III**
T 76.1–76.4	Wed	15:50–16:50	WIL/A120	**Gas-Detectors**
T 77.1–77.6	Wed	17:20–18:50	HSZ/0401	**Flavor VI**
T 78.1–78.6	Wed	17:30–19:00	HSZ/0304	**Flavor VII**
T 79.1–79.5	Wed	17:30–18:45	HSZ/0403	**Searches III**
T 80.1–80.6	Wed	17:30–19:00	HSZ/0101	**Searches EW II**
T 81.1–81.6	Wed	17:30–19:00	HSZ/0103	**Single Top, Top Properties**
T 82.1–82.6	Wed	17:30–19:00	HSZ/0105	**Higgs, Di-Higgs II**
T 83.1–83.4	Wed	17:30–18:30	HSZ/0201	**Theory BSM**
T 84.1–84.6	Wed	17:30–19:00	HSZ/0204	**Theory EW**

T 85.1–85.5	Wed	17:30–18:45	HSZ/0301	**DAQ, Data Techniques**
T 86.1–86.6	Wed	17:30–19:00	HSZ/0405	**ML Methods IV**
T 87.1–87.6	Wed	17:30–19:00	POT/0051	**Neutrinos III**
T 88.1–88.6	Wed	17:30–19:00	POT/0151	**Gamma Astronomy IV**
T 89.1–89.6	Wed	17:30–19:00	POT/0251	**DM, Neutrino Theory**
T 90.1–90.6	Wed	17:30–19:00	POT/0361	**Neutrinos, Dark Matter X**
T 91.1–91.6	Wed	17:30–19:00	POT/0006	**Neutrinos IV**
T 92.1–92.6	Wed	17:30–19:00	POT/0013	**Cosmic Ray IV**
T 93.1–93.6	Wed	17:30–19:00	POT/0351	**Exp. Methods – Scint., HESS, Auger**
T 94.1–94.6	Wed	17:30–19:00	POT/0106	**DAQ, Exp. Methods**
T 95.1–95.6	Wed	17:30–19:00	WIL/A317	**Pixel, Det/Sys LHCb, HGT**
T 96.1–96.6	Wed	17:30–19:00	WIL/A124	**TestBeam, RadHard for Si and Pixel**
T 97.1–97.6	Wed	17:30–19:00	WIL/C133	**Calorimeter / Detector Systems IV**
T 98.1–98.6	Wed	17:30–19:00	WIL/A120	**Gas-Detecors, Detector Systems**
T 99	Wed	19:00–20:00	HSZ/0101	**Annual Meeting of Young Scientists in High Energy Physics (yHEP)**
T 100.1–100.3	Thu	11:00–12:30	HSZ/AUDI	**AI Topical Day – Invited Talks (joint session AKPIK/HK/ST/T/AKBP)**
T 101.1–101.4	Thu	14:00–15:20	HSZ/0003	**Invited Topical Talks III-A**
T 102.1–102.4	Thu	14:00–15:20	HSZ/0004	**Invited Topical Talks III-B**
T 103.1–103.6	Thu	15:45–17:15	HSZ/0004	**AI Topical Day – Simulation, Inverse Problems and Algorithmic Development (joint session AKPIK/T)**
T 104.1–104.6	Thu	15:50–17:20	HSZ/0304	**Flavor VIII**
T 105.1–105.6	Thu	15:50–17:20	HSZ/0401	**Flavor IX**
T 106.1–106.5	Thu	15:50–17:05	HSZ/0403	**Searches IV**
T 107.1–107.6	Thu	15:50–17:20	HSZ/0101	**Searches – Neutrino at accelerators**
T 108.1–108.6	Thu	15:50–17:20	HSZ/0103	**Top, EW I**
T 109.1–109.6	Thu	15:50–17:20	HSZ/0105	**Higgs, Di-Higgs III**
T 110.1–110.6	Thu	15:50–17:20	HSZ/0201	**Other Theory**
T 111.1–111.6	Thu	15:50–17:20	HSZ/0204	**Outreach Diverse (joint session T/HK)**
T 112.1–112.6	Thu	15:50–17:20	HSZ/0301	**DAQ Test/RO – GRID I**
T 113.1–113.6	Thu	15:50–17:20	HSZ/0405	**QCD Theory and Experiment II**
T 114.1–114.6	Thu	15:50–17:20	POT/0051	**Neutrinos V**
T 115.1–115.6	Thu	15:50–17:20	POT/0151	**Gamma Astronomy V**
T 116.1–116.6	Thu	15:50–17:20	POT/0251	**Neutrinos Legend, Neutrino Theory**
T 117.1–117.6	Thu	15:50–17:20	POT/0361	**Dark Matter I**
T 118.1–118.6	Thu	15:50–17:20	POT/0006	**Dark Matter II**
T 119.1–119.5	Thu	15:50–17:05	POT/0112	**Neutrino Astronomy IV**
T 120.1–120.6	Thu	15:50–17:20	POT/0013	**Cosmic Ray V**
T 121.1–121.6	Thu	15:50–17:20	POT/0351	**Cosmic Ray VI**
T 122.1–122.4	Thu	15:50–16:50	POT/0106	**DAQ Systems**
T 123.1–123.6	Thu	15:50–17:20	WIL/A317	**Pixel/Belle II, Si/Other**
T 124.1–124.6	Thu	15:50–17:20	WIL/A124	**Si-Strip/CMS, Pixel/DMAPS**
T 125.1–125.6	Thu	15:50–17:20	WIL/C133	**Calorimeter / Detector Systems V**
T 126.1–126.6	Thu	15:50–17:20	WIL/A120	**Gas-Detecors, Detector Systems**
T 127.1–127.5	Thu	15:50–17:05	WIL/C129	**Exp. Methods III**
T 128.1–128.6	Thu	17:30–19:00	HSZ/0004	**AI Topical Day – New Methods (joint session AKPIK/T)**
T 129.1–129.6	Thu	17:30–19:00	HSZ/0304	**Flavor X**
T 130.1–130.5	Thu	17:30–18:45	HSZ/0401	**Top II**
T 131.1–131.5	Thu	17:30–18:45	HSZ/0403	**Searches V**
T 132.1–132.6	Thu	17:30–19:00	HSZ/0101	**Searches VI**
T 133.1–133.6	Thu	17:30–19:00	HSZ/0103	**Top, EW II**
T 134.1–134.6	Thu	17:30–19:00	HSZ/0105	**Higgs, Di-Higgs IV**
T 135.1–135.6	Thu	17:30–19:00	HSZ/0201	**Top Mass, Top BSM**
T 136.1–136.6	Thu	17:30–19:00	HSZ/0204	**Higgs TH, VH**
T 137.1–137.6	Thu	17:30–19:00	HSZ/0301	**DAQ Test/RO – GRID II**
T 138.1–138.5	Thu	17:30–18:45	HSZ/0405	**QCD Experiment III**
T 139.1–139.6	Thu	17:30–19:00	POT/0051	**Neutrinos VI**
T 140.1–140.6	Thu	17:30–19:00	POT/0151	**Gamma Astronomy VI**
T 141.1–141.6	Thu	17:30–19:00	POT/0251	**Neutrino Astronomy V**
T 142.1–142.6	Thu	17:30–19:00	POT/0361	**Neutrinos, Dark Matter XI**

T 143.1–143.6	Thu	17:30–19:00	POT/0006	**Neutrinos VII**
T 144.1–144.6	Thu	17:30–19:00	POT/0013	**Cosmic Ray VII**
T 145.1–145.6	Thu	17:30–19:00	POT/0351	**Cosmic Ray VIII**
T 146.1–146.6	Thu	17:30–19:00	POT/0106	**DAQ Systems, Exp. Methods**
T 147.1–147.6	Thu	17:30–19:00	WIL/A317	**Pixel/HV-Maps, Si/Diamond**
T 148.1–148.6	Thu	17:30–19:00	WIL/A124	**Si/SiPM, Pixel/Other**
T 149.1–149.6	Thu	17:30–19:00	WIL/C133	**Detector Systems / Muon**
T 150.1–150.6	Thu	17:30–19:00	WIL/A120	**Gas-Detecors, Pixel/TANGERINE**
T 151.1–151.6	Thu	17:30–19:00	WIL/C129	**Exp. Methods IV**
T 152	Thu	20:00–22:00	HSZ/0003	**Members' Assembly**
T 153.1–153.3	Fri	11:00–12:30	HSZ/AUDI	**Invited Overview Talks III**
T 154.1–154.1	Fri	13:30–14:00	HSZ/AUDI	**Invited Overview Talks IV**

Members' Assembly of the Particle Physics Division

Thursday 20:00–22:00 HSZ/0003