View this email in your browser FUSION IN EUROPE The official newsletter of the EUROfusion consortium for the realisation of fusion energy. Join us as we explore the exciting world of fusion research. Photo: Orb of power by Ramón Salinero on Unsplash Dear *|FNAME|*, Welcome to the second issue of the Fusion in Europe newsletter for 2023! In this issue, we start with an enlightening essay by Ambrogio Fasoli, Chair of the EUROfusion General Assembly and Head of the Swiss Plasma Center at EPFL. Ambrogio's essay titled "Overcoming the Obstacles to a Magnetic Fusion Power Plant" offers valuable insights into the challenges and pathways towards achieving fusion power. We also serve up the fun and factual article "the everyday science of fusion" from Science in School magazine, give you the chance to learn about the new High Performance Computer for EUROfusion AND the recent 2024 EUROfusion Researcher Grants and Engineering Grants, and invite you to discover many more updates from the EUROfusion consortium and our valued partner organizations, including Hartmut Zohm tackling 5 Fusion Myths and hearing about the winner of the prestigious Rutherford Plasma Physics Communication Prize 2023: the award-winning *CoffeeBreakDown* podcast. Congratulations to creators Aaron Ho and Luca Vialetto! We always value your input and encourage you to share your comments, suggestions, and questions with us at news@euro-fusion.org or via our NEW super quick survey at the end of the newsletter. Your feedback is essential in helping us deliver content that meets your interests and needs. Thank you for your continued support, and we hope you enjoy this issue of *Fusion in Europe*. Best regards, The Fusion in Europe team. **Essay: Overcoming the Obstacles** to a Magnetic Fusion Power Plant In his essay, EUROfusion General Assembly Chair and Head of the Swiss Plasma Center at EPFL Ambrogio Fasoli presents a visionary outlook on the prospects and hurdles involved in achieving sustainable magnetic fusion. Courtesy of Ambrogio Fasoli Courtesy of EPFL Laboratory for Experimental Museology (eM+) Courtesy of the Swiss Plasma Center at EPFL Credit: ITER Organization 2024 EUROfusion Engineering Grants 2024 EUROfusion Bernard Bigot Researcher Grants The everyday science of fusion Explore the everyday science behind the quest Science in School to harness fusion energy – the energy that powers the stars – in a safe way here on Earth. The European journal for science teachers ENEA, EUROfusion and CINECA new fusion supercomputer A new state-of-the-art supercomputer for the European fusion community will be installed in Bologna in late 2023. This High Performance Computing infrastructure will deliver 50 million billion operations per second for European fusion research. Copyright CINECA - used with permission (<u>Press release in Italian</u>) **Technical University of Denmark (DTU)** Credit © ITER Organization, http://www.iter.org/ Op-ed: the age of fusion is coming Fusionsenergi.dk holds a summer camp about fusion energy Forschungszentrum Jülich GmbH (FZJ) Sebastijan Brezinsek wins IAEA Nuclear Fusion Award (in German) Prof. Sebastijan Brezinsek, Copyright: — Forschungzentrum Jülich / Ralf-Uwe Limbach MAX PLANCK INSTITUTE
FOR PLASMA PHYSICS **Max Planck Institute for Plasma Physics (IPP)** The Charkiw Lectures on the Charkiw Lectures on stellarator concepts by IPP & Karazin University (June 28, 2023) Credit: MPI for Plasma Physics 5 myths about nuclear fusion fusion research Credit: MPI for Plasma Physics/Volker Rohde ASDEX Upgrade results point to Hartmut Zohm Tackles five fusion more compact fusion power plants myths on YouTube : IPP Institute of Plasma Physics of the Czech Academy of Sciences (IPP.CR) SUMTRAIC: a summer school with real tokamak data L-Università ta' Malta University of Malta (UM) UM and MCST representing Malta within EUROfusion programme **DIFFER Dutch Institute for Fundamental Energy Research (DIFFER)** Courtesy of Aaron Ho and Luca Vialetto Copyright: Ricky van Kampen CoffeeBreakdown podcast wins <u>Using fusion to track groundwater</u> communication prize flows FuseNet PhD Event 2023 **Key Note Speakers FuseNet PhD Event 2023** ©FuseNet EPFL 2023 EPFL FuseNet 4 States of Matter FuseNet Master Event European Fusion Teacher Day Primary school materials 23 November 2023 European Teacher Day 6 October FuseNet Master Event New overview of fusion 23 November education materials in NEWS FUSION FOR ENERGY Success for MITICA Cryopump site Why international collaboration in research matters <u>tests</u> F4E Director nominee visits JT-<u>Is robotic welding quicker and</u> <u>60SA</u> more precise? in 0 flickr iter World science Temporary control Repairs: preparing a <u>journalists meet ITER</u> <u>critical task</u> <u>rooms</u> The ITER Podcast: Episode 4, Season 2 In "ITER Robots: Connecting as Humans," host Kruti Mawani Fayot joins middle and high school students at the annual ITER Robots event, where they compete with Lego-based robots that have been designed and programmed to complete ITER-like handling tasks. ITER STORIES - PODCAST Listen to the latest episode directly on the <u>ITER</u> website or through the following channels: Amazon Music, Apple Podcasts, Google Podcasts, PodBean, Spotify, and Tune In. in 0 O WIF WOMEN IN FUSION <u>Upcoming dinner at the 30th IEEE</u> Symposium on Fusion Engineering (SOFE2023) 10 July 2023 WOMEN IN FUSION DINNER AT July 10, 2023 Oxford in 0 **f** O IFMIF DONES GRANADA WiD Women in Dones Attracting 150 Registrations for JT-Recognising the role of companies to the <u>60SA International</u> women in Dones R+Dones Forum Fusion School in f 0 • Powermag.com - Fusion Energy Reaches Prime Time • EurekAlert.org - To track turbulence in tokamaks, researchers turn to machine learning • Scientific American - What Is the Future of Fusion Energy? • ENERGInyheter.se - Genombrottet inom fusionsenergi skapar exportmöjligheter för finländska <u>företag</u> (The breakthrough in fusion energy creates export opportunities for Finnish companies) **VIDEOS** • Man-made Nuclear Fusion | Dr. Kian Rahbarnia | TEDxYouth@EEB3 (16:40) PODCASTS CoffeeBreakDown (YouTube Channel) • Ep.29 - Machine Learning in Surface Science • Ep.28 - <u>Experiences from Women in Science</u> • Ep.27 - <u>Accelerating Fusion With Machine Learning</u> • Ep.26 - The Outer Rim of the Plasma Fusion Focused (Spotify) • S2 E4: <u>Jane Hotchkiss</u> (1:00:36) • S2 E5: <u>Dr Humberto Torreblanca</u> (26:25) • S2 E6: <u>Dr Steffi Diem</u> (31:17) • S2 E7: <u>Cyd Cowley</u> (48:51) The ITER Podcast (website) • Season 2, Episode 2: "Visiting Planet ITER" (31:41) • Season 2, Episode 3: "Falling for Fusion" (25:11) • Season 2, Episode 4: "ITER Robots, Connecting as Credit © ITER Organization, http://www.iter.org/ WEBINARS <u>FusionEPtalks</u> (check out their <u>YouTube channel</u> for all the webinar recordings) FusionEPtalks #83 by Dr. Satoshi Togo • SOL-divertor plasma fluid simulations based on the anisotropic ion pressure with a virtual • FusionEPtalks #82 by Dr. Dieter Boeyaert Design of a divertor for HSX FusionEPtalks #81 by Dr. Jan Mlynář • My experience with ill-posed problems (tomography, deconvolution) FusionEPtalks #80 by Dr. Dmitri M. Orlov Crossover of space exploration and fusion research 0 **EVENTS** • CEA's FUSION pour TOUS - 19-23 June • Summer School of Plasma Diagnostics, PhDiaFusion 2023 - 19-23 June • 12th ITER International School - 26-30 June • <u>UKAEA's 60th Plasma Physics Summer School</u> - 17-23 July • IPP Prague's 19th summer training course: <u>SUMTRAIC 2023</u> - 28 August to 8 September SUMTRAIC a two-week fusion school THANKS FOR READING

How did you like this issue? Have any questions?

Was someone nice enough to forward you this newsletter?

How wonderful!

If you would like to stay updated with our future newsletters, we cordially invite you to subscribe by clicking the link below. We would be thrilled to have you as part of our community!

SUBSCRIBE HERE

EUROfusion

Our mailing address is: *|IFNOT:ARCHIVE_PAGE|**|HTML:LIST_ADDRESS_HTML|**|END:IF|*

Want to change how you receive these emails?
You can <u>update your preferences</u> or <u>unsubscribe</u>