Introduction to the *Gauss Fusion Initiative*

- **Leading the European Industrialization of European Fusion Power Plants (EFPPs)**
- **Industrial High-Field Magnetic Confinement Fusion Strategy**
- **A European Greentech Venture Initiative**
- **Fusion-Experienced Industrial Partners, Board and SSAB**
- **Accelerate Fusion Progress with Venture Speed and Private-Public Partnerships**
- **Desire for strategic cooperations with ITER, EUROfusion, CERN, and selected institutes**
- **Industrialized and Maintainable European Fusion Power Plants (EFPPs) in 20 Years**
- **Goal to Achieve European Strategic Energy Independence with low Carbon Footprint**
- **Key Baseload Technology to Replace Nuclear Fission Reactors by mid-Century (DE, IT, CH, etc.)**
- **Fusion Ideal in Combination with Renewable Solar, Wind and Green Hydrogen Power**

Frank H. Laukien, PhD, Chairman of the Board (Beiratsvorsitzender), Gauss Fusion GmbH
Dr. Hermann, Requardt, Board of Directors (Beiratsmitglied), Gauss Fusion GmbH
Dr. Klaus Schlenga, Managing Director/Geschäftsführer, Gauss Fusion GmbH

2. Forum FUSION Deutschland (FFD), IPP, Garching - December 8, 2022

Outline

- Introducing the Gauss Fusion Initiative
- Motivation for magnetic confinement EFPP within 20 years
- Gauss Fusion Approach
  - Phase 1: Concept Refinement & Engineering Analysis (2023-2024)
  - ‘Kraftwerk’ Phase 2: Roadmap for first **European Fusion Power Plant (EFPP)** in 20 years (~2045)
- Gauss Fusion Initial Team: Board & SSAB
  - Now accepting applications for leadership, scientific and technical positions

Introducing the Gauss Fusion Initiative:
targeting a first EFPP in 20 Years

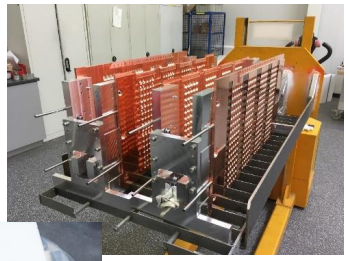
Gauss Fusion GmbH:

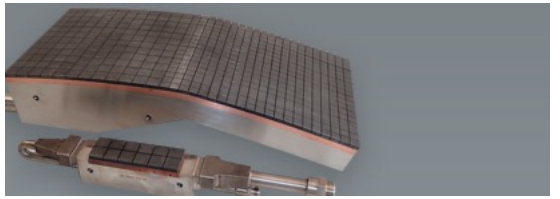
- Legal entity *Gauss Fusion GmbH* is a magnetic confinement fusion venture company founded in 2022
  - Funding requires industrial investments, European and US venture capital, and vision, long-term energy strategies with commitment by Germany and selected other European countries
  - The Gauss Fusion Initiative aims to integrate industrial leadership with key academic/institute partners

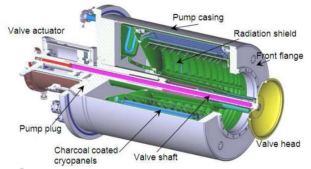
- Purpose of Gauss Fusion GmbH is development and commercialization of industrialized European fusion power plants (EFPPs), and related key magnetic confinement fusion technologies
  - Development of fusion device concept together with Europe's leading fusion institutes and scientists
  - Industrial Project and Testing, Assembly and Integration planning
  - Management by industry-trained leadership according best industrial practices
  - Implementation of comprehensive risk assessment and management
  - Development of full life-cycle cost models for European decision makers
  - Full European technology and supply chain for strategic energy independence

- Founding members with unparalleled experience in fusion technology engineering and fusion components manufacturing to integrate and pioneer the European industrial base for Fusion Power Plants (EFPPs)

Gauss Fusion Initial Industrial Founders (TBD expected to join in 2023-2024):







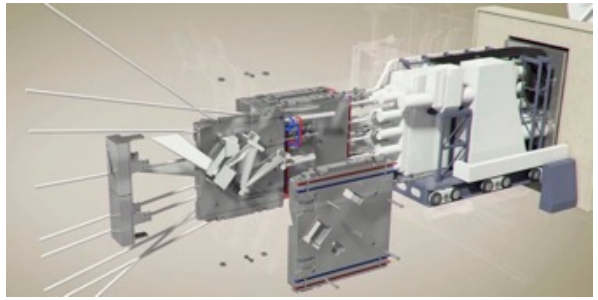
ALSYMEX
ALCEN

research instruments

TBD

TBD

IDOM



TBD

TBD

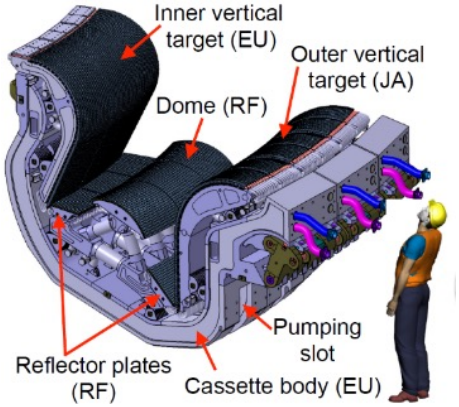
ASG SUPERCONDUCTORS

BRUKER

Various BEST metallic superconductors: NbTi, Nb3Sn, PIT, RRP

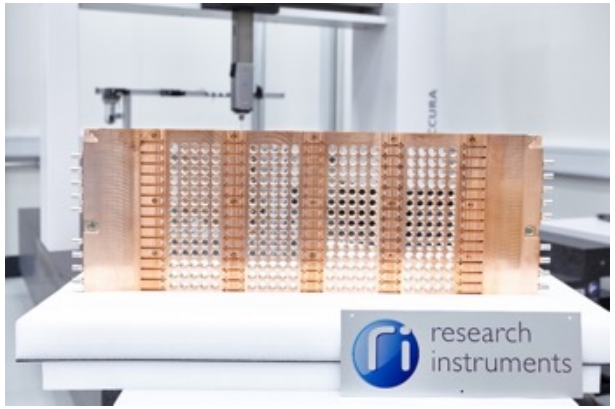
Examples of Magnetic Confinement Fusion technologies by founding members (1/4):

Divertor parts: Inner Vertical Target
(most heat loaded divertor component)



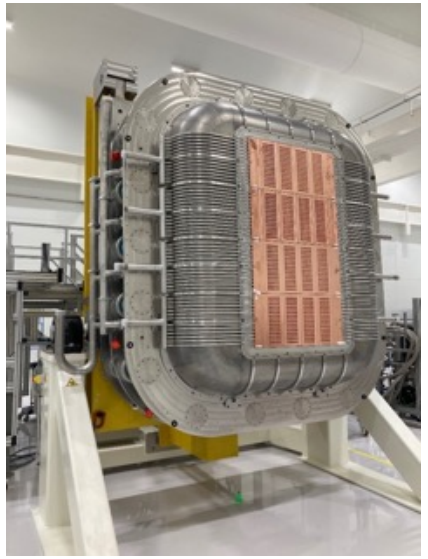
Cryogenic valve boxes

Cryo-pump infrastructure (warm
regeneration box)



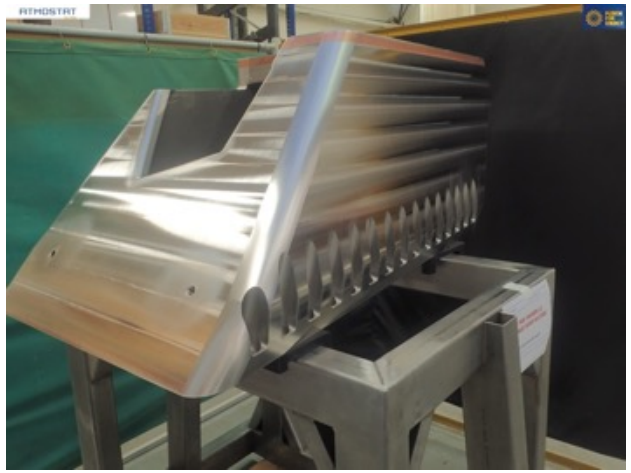
NBI grids (above) and NBI sources (below)

ALSYMEX
ALCEN

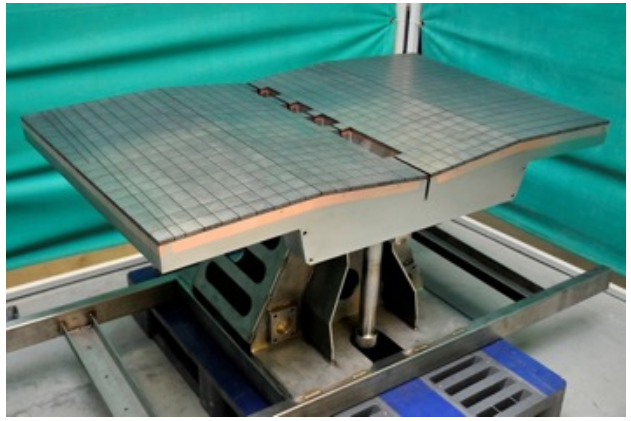


KATRIN experiment: Windowless Gaseous Tritium Source
(annual tritium throughput app. 10 kg in a closed loop)

Examples of Magnetic Confinement Fusion technologies by founding members (2/4):

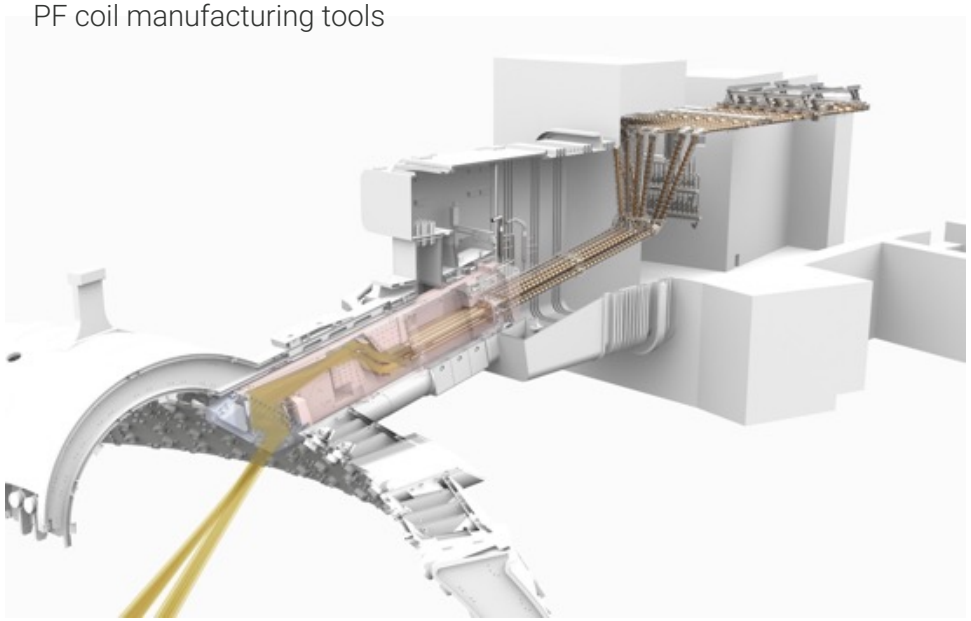


Test Blanket Module

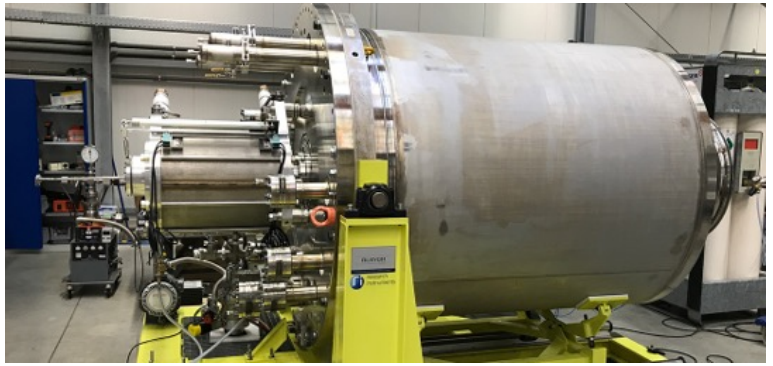


First Wall Panel

PF coil manufacturing tools



ECRH launcher

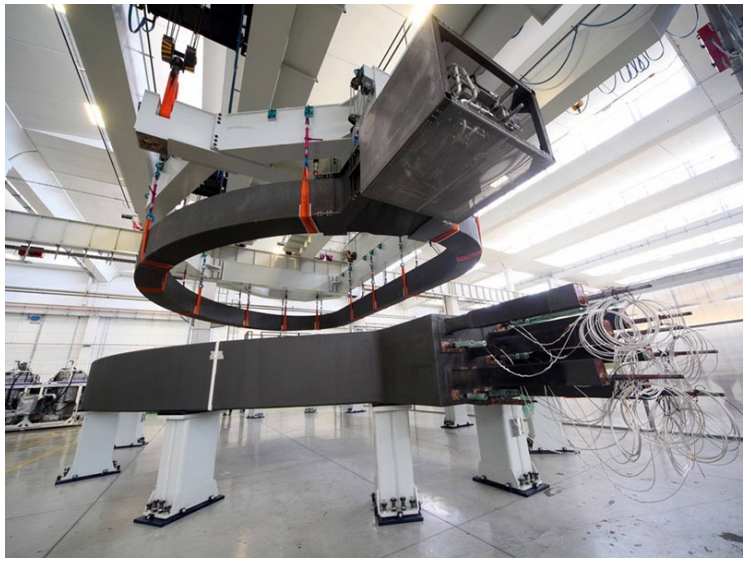


Cryogenic pumps for ITER

Test cryostat and PF coils manufacturing tools

Examples of Magnetic Confinement Fusion technologies by founding members (3/4):

Wendelstein 7-X winding pack of non-planar coil

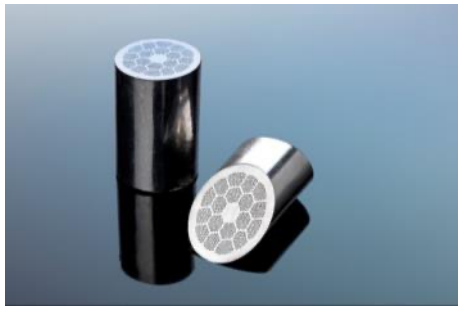


ITER TF coil winding pack

ITER PF winding facility (on site)

Examples of Magnetic Confinement Fusion technologies by founding members (4/4):

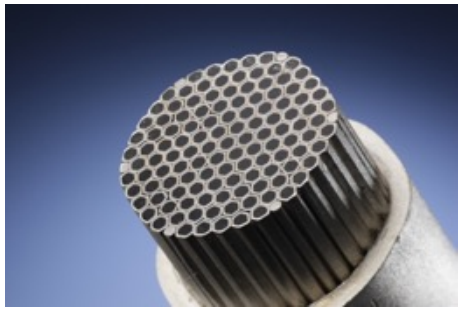
- Bi-2212 (1987 – today) in Carteret, NJ

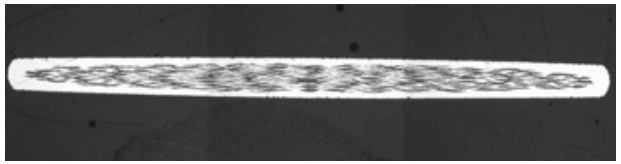


Bruker has extensive experience with all relevant HTS materials:

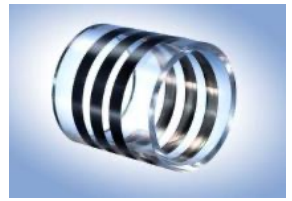
- HTS not industrialized or cost-effective; difficult quench protection
- Neutron-radiation deteriorates YBCO
- EFPP design must not be too compact, needs T-blanket, divertors

- Bi-2223 (1992-2011)





- YBCO (since 2004, now with KIT)



Patrick Wikus et al. "Commercial gigahertz-class NMR magnets" Supercond. Sci. Technol. **35** (2022) 033001

Bruker 1.2 GHz NMR at BNMRZ in Garching

Motivation for magnetic confinement EFPP within 20 years

Magnetic confinement viable for controlled fusion energy

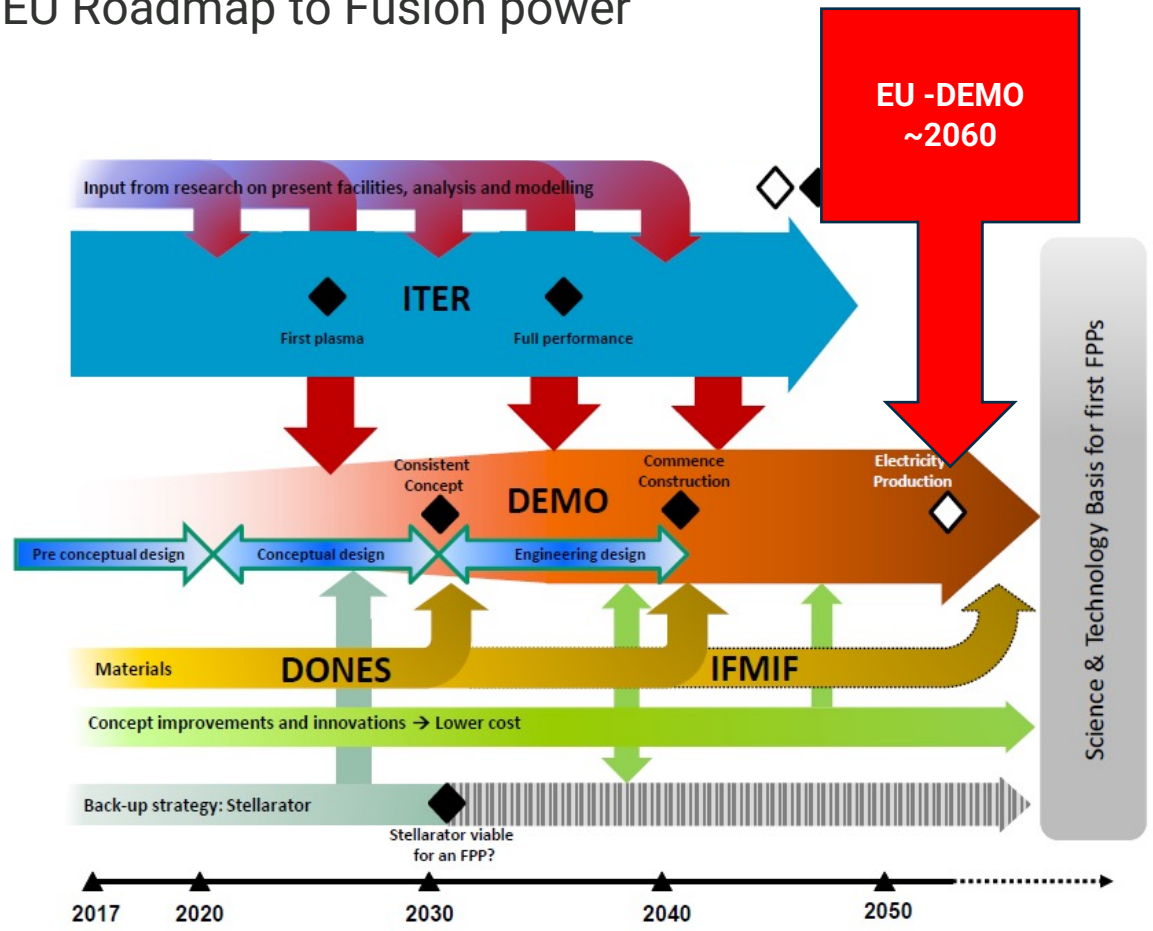
- Magnetic confinement is the most advanced nuclear fusion concept
  - Superconducting magnets are well-established technology (for ITER, Wendelstein 7-X)
  - No real scientific barrier identified, but multiple technological and integration challenges
  - Broad scientific backing available, with greatest experience worldwide in Europe
  - Higher-field metallic superconductors now available (developments for NMR, CERN) for robust, high-field tokamak (or stellarator) magnets, at industrial scale and cost, with superior neutron radiation resilience
  - Super-compact designs without Tritium-breeding, magnet radiation protection, divertors for VCs, not EFPP
- Laser inertial confinement fusion decades behind
  - Private venture interest driven by laser device improvements
  - In our analysis, laser fusion an academic/military niche compared to magnetic confinement fusion
  - US National Ignition Facility (NIF) mainly built for military purposes
- Thanks to JET, ITER, W7-X (Wendelstein) and DTT, European industry is experienced with magnetic confinement technology and the supply chain is world-leading in Europe (including EU, CH, UK)

Gauss Fusion selected high-field magnetic confinement as fastest approach to fusion energy production

FUSION WITH INTEGRITY

The present EU-DEMO Fusion Roadmap, other nations' fusion ventures:

EU Roadmap to Fusion power



Other nations and private fusion ventures

Other nations establish parallel paths to fusion energy, as ITER, and hence EU-DEMO is much delayed, realistically to 2060 or beyond:

- China: (CRAFT 2025, BEST 2027, CFETR start 2030, PFPP power plant validation)
- UK: STEP
- Korea: K-DEMO
- US: DOE Program & VC-funded startups
- JP: https://www.asahi.com/ajw/articles/14718757

- Last few years: >30 private fusion start-ups worldwide, with more than $4 billion in venture capital (VC):
  - CFS (US) ~$2B to demonstrate fusion (D+T) with more compact tokamak by applying High Tc Superconductors (HTS), after a successful single coil test
  - TAE (US, field reversed mirror) with NBI raised >$880M
  - Helion Energy (US, Linear compression with FRC core) raised $500M, and $1.7B tied to milestones
  - Tokamak Energy (UK) received >GBP 100M
  - Marvel Fusion (DE) and Focused Energy (US/DE) bet on laser inertial confinement fusion, have raised VC funding

Gauss Fusion Initiative Phase 1:

Concept & Engineering Analysis phase (2023-2024)

Gauss Fusion Initiative Phase 1 (2023-2024):

- **Concept Refinement & Engineering Analysis: enhanced, designs for magnetic confinement fusion**
  Higher field metallic (or HTS) superconductors and magnets, tokamak (or stellarator) geometries, tritium-breeder blankets, divertors, plasma heating, energy extraction, replaceable modules, etc.

- **Establishment of collaborations with leading European fusion institutes:**
  hopefully IPP, KIT, SPC, CERN, EUROfusion, ITER/F4E

- **Broaden European industrial fusion initiative:**
  visionary, committed *European corporate citizens*, including energy infrastructure providers and power plant operators

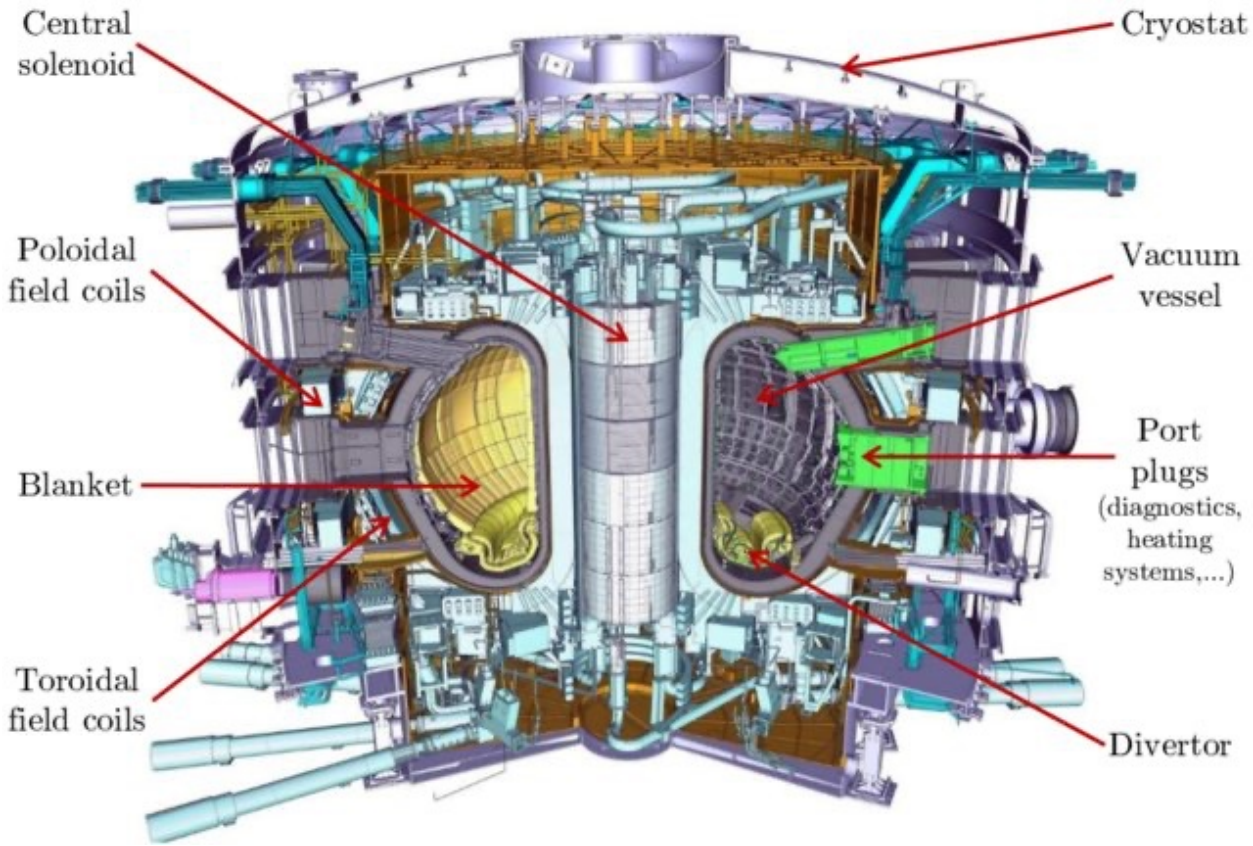
- **Development of European/national strategies and funding for Fusion Power Plants in 20 years:**
  DE, IT, CH, eventually FR, UK, many others (ES, BE, NL, Scandinavia – all tbd)

High-Field Fusion Power Plant: Designs and Challenges

Challenges in Fusion with Tokamak Magnetic Confinement for industrialization:

- Engineering issues (solution feasible):
  - Strong magnetic field and tensile strength of mechanical magnet supports
  - Robotic exchanges of divertor and first wall elements
- Existing solutions, if judiciously chosen:
  - Some materials withstand very high neutron flux
  - Power density in divertor
- Tests in ITER, DTT, IFMIF-DONES and *Gauss EFPP* :
  - Tritium breeding blanket(s)
  - Keep plasma burning & stable for minutes
  - Extract fusion energy from tokamak for power

Schematic of ITER (Tokamak):



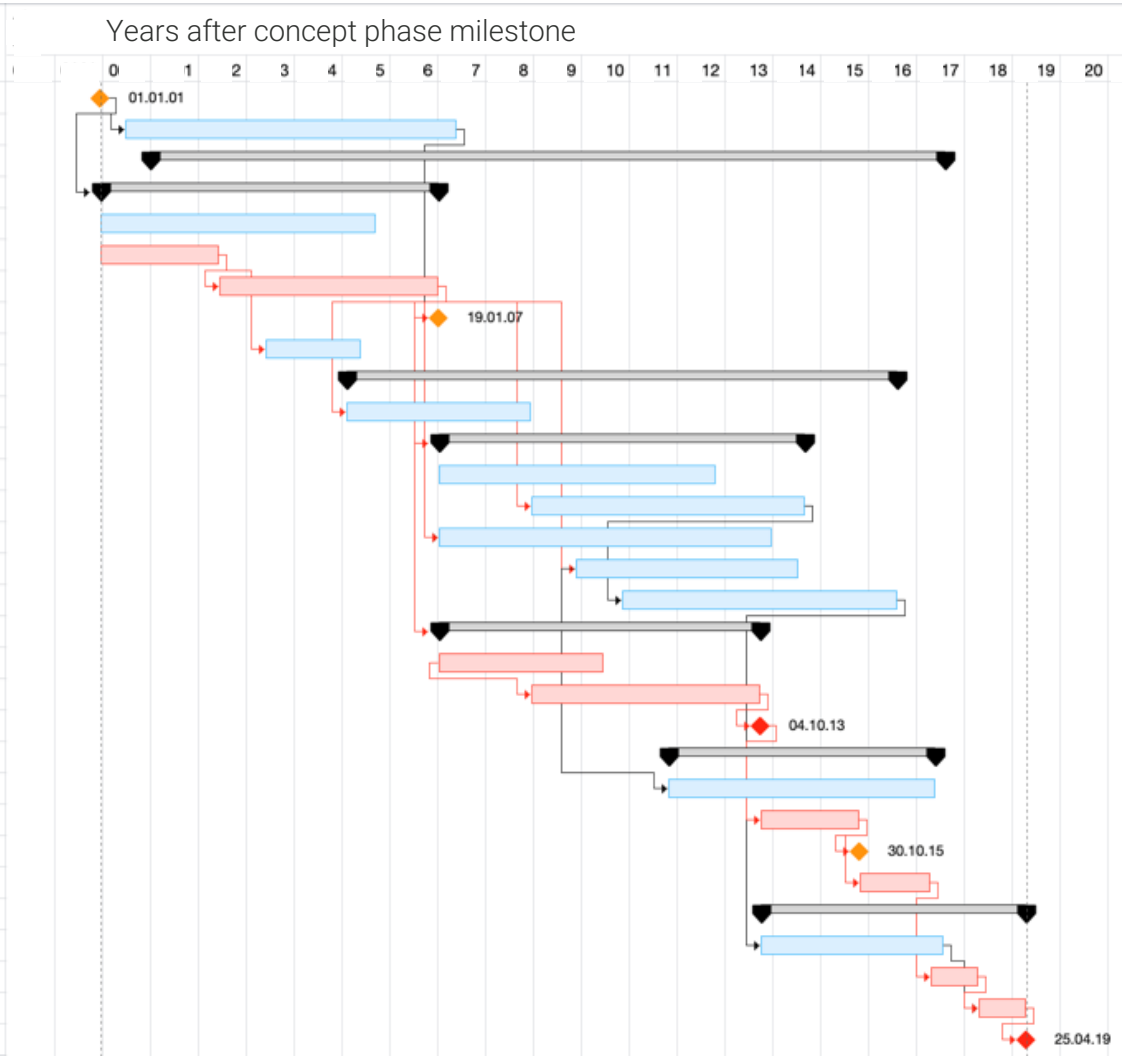
FUSION WITH INTEGRITY

Gauss Fusion ‘Kraftwerk’ Phase 2:

Roadmap for building a European Fusion Power Plant (EFPP) in 20 years

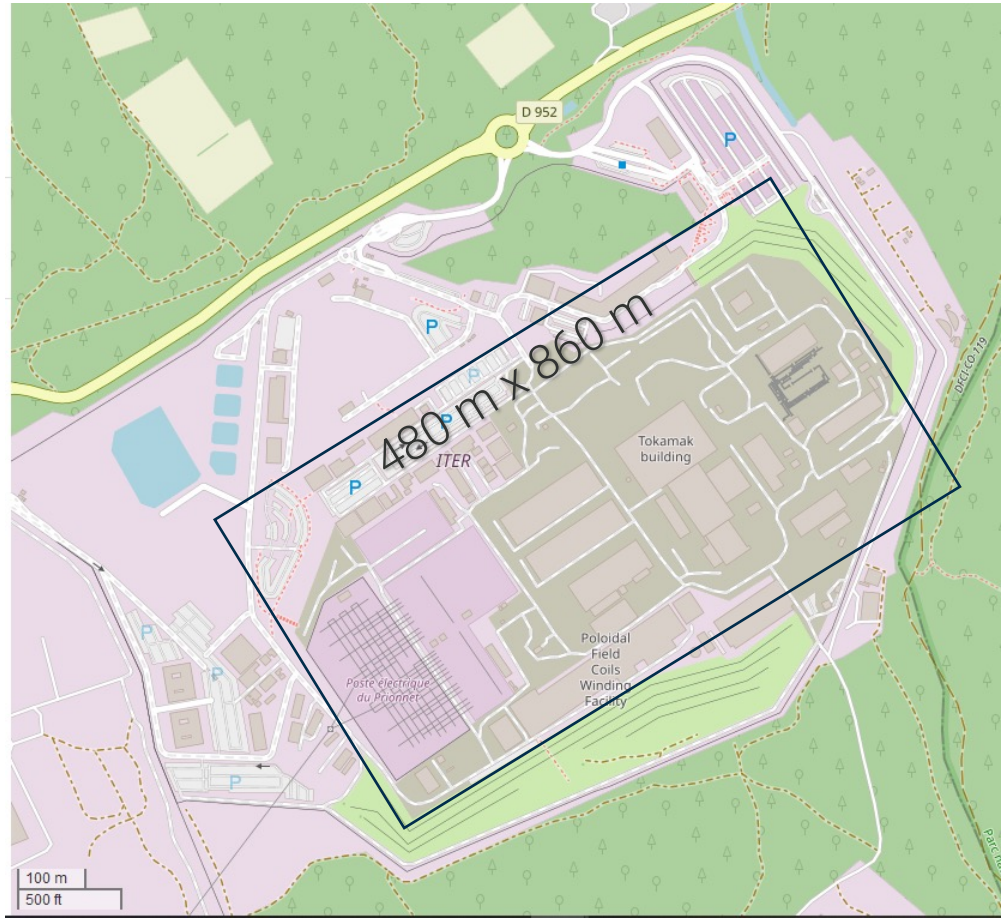
Gauss Fusion EFPP Roadmap critical path

Name	Dauer
Design cornerstones fixed	0 mo
Site selection (incl. migration)	89,99 mo
Nuclear licensing process	**216,99 mo**
Preparation / Dev / Design	**91,97 mo**
Detailed technical development	74,99 mo
Conceptual design	31,99 mo
Detailed design	59,99 mo
Design complete	0 mo
Supplier identification	25,99 mo
Construction, manufacturing and assembly	**150 mo**
Early procurement (materials, parts, services)	50 mo
Procurement	**100 mo**
Non nuclear components	75,49 mo
Nuclear components	75 mo
Civil engineering	90,99 mo
Infrastructure assembly	60,49 mo
Nuclear assembly	75 mo
Machine assembly	**87,49 mo**
Preparations and qualifications	44,99 mo
Core machine assembly	62,49 mo
Core machines assembled	0 mo
Comissioining and H-plasma operation	**72,99 mo**
Infrastructure commissioing	72,99 mo
Machine commissioning for 1st light	26,99 mo
First light	0 mo
H-Plasma commissioning and operation	19,49 mo
Nuclear commissioning	**72,43 mo**
Nuclear commissioning	50 mo
Pre-nuclear machine repair and maintenance	12,99 mo
DT commissioing	12,99 mo
Beginn DT Operation	0 mo



Site Comparison ITER vs. KKW Brunsbüttel:

- ITER/CEA Caderache, France



- KKW Brunsbüttel, Germany

We are ambitious and fast …but realistic with experienced experts

- Less overhead, multinational governance for venture decision speed ⇒ lower costs, save many years to EFPP
- Industrial fusion plant built with maintenance & repairability fully integrated into design (no ‘DEMO’, but EFFP)
- European independent development for strategic energy independence
- Concept for industrial and institutional close collaboration with political decision makers in selected countries
- Established industry and technologies existing in Europe, to be advanced further and made globally leading
- Use German/Italian/Swiss (European) existing legacy nuclear fission reactor sites
- Enhance DD reactions to reduce tritium breeding requirement (over time)
- Higher-field tokamak design (Stellarator option under evaluation) for improved plasma stability
- Seek scientific advice globally and European industrial, institutional/consortium, governmental collaborations
- Using proven magnetic confinement fusion systems code

Gauss Fusion Initiative – Leading the Industrialization of European Fusion Power Plants (EFPPs)

- Industrialized high-field magnetic confinement (HFMC) at ~7-9 Tesla
- Leveraging novel high-Jc RRP (rod restack process, up to 700A/mm² at 16 Tesla) superconductors for robust, radiation-resistant high-field fusion magnet designs
- Flexibility to leverage stellarator designs or HTS magnets in future decades, if designs are sustainable (forces, neutron load, heat load, coil exchange concept) and industrialized, radiation-resistant
- Vision to advance to D-D fuel eventually ('fuel from sea water') in second half of century
- European scientific and technological base, supply chain for strategic energy independence
- Tritium blanket for self-sustainability, jump-start other fusion power plants in Europe and worldwide
- 3-5 GW GAUSS GIGA EFPP replacing aging fleet of nuclear fission reactors at present locations to generate stable baseload fusion power for second half of 21st century and next millennium
- Complements solar, off-shore wind and green hydrogen in future energy mix to combat climate change

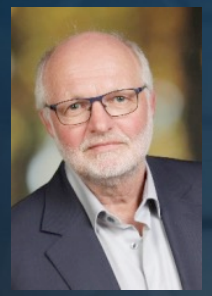
Gauss Fusion Team

Board of Directors and Scientific & Strategic Advisory Board (SSAB)

- Now accepting applications for key leadership, scientific and technical positions

Gauss Fusion Initiative – Leading the European Industrialization of Fusion Power - Board of Directors (Beirat)

Frank H. Laukien is the Executive Chairman of Gauss Fusion GmbH. He is President and CEO of Bruker Corporation (Nasdaq: BRKR, ~$2.5B revenue), which includes the Bruker Energy & Supercon Technologies (BEST) division. After his Abitur in Germany, he earned a Bachelor of Science in physics from MIT, and a Ph.D. in chemical physics from Harvard University. He is a senator of acatech – the German Academy of Technical Sciences. Frank has numerous publications and patents, is an expert in superconducting materials and magnet technology. Frank is co-founder of venture companies in therapeutics and space exploration, and author of two books *Active Biological Evolution* and *Origins & Evolution*. Frank is a Visiting Scholar in the Harvard Department of Chemistry & Chemical Biology, co-Founder of the Galileo Project, and Co-Chair of the AACR Cancer Evolution Working Group. He is passionate about clean fusion, solar and wind energy and European strategic energy independence.



Michael Peiniger is co-Founder and Managing Director of RI Research Instruments GmbH, a designer and supplier of core components, systems and technologies to fusion, high-energy physics and medical, pharma, and technology industries. Michael received his Ph.D. in physics from University of Wuppertal in 1989. In 1987, he joined Siemens Interatom GmbH to provide rf accelerators and special manufacturing projects for research and industry. In 1994, Michael was a partner in a management buy-out to co-found ACCEL Instruments GmbH, which later was sold to Varian Medical Systems. Since 2009, the rf accelerator and special manufacturing projects business became RI Research Instruments GmbH, in Bergisch-Gladbach. Under Michael's leadership RI developed and expanded its technology capabilities to particle accelerators, to key technologies for fusion energy and semicon/EUV systems.

Dr. Hermann Requardt serves as strategic advisor to a number of European life science and healthcare technology companies. From 2009 to February 2015, he served as CEO of the healthcare division of Siemens AG. He also served as Chief Technology Officer of Siemens AG from 2008 through 2011. From 2006 through 2015, he was on the Siemens AG Managing Board. Dr. Requardt joined Siemens Medical Solutions in 1984 before assuming responsibility for the magnetic resonance business in 1994. Dr. Requardt is honorary Professor of Physics at University of Frankfurt and serves on academic and industrial boards in Germany, including as Vice President of acatech, the National Academy of Science and Engineering. He also is a member of the Advisory Board of Dekra SE, the Supervisory Board of Sivantos Group and the board of Bruker Corporation. Dr. Requardt has served as non-executive director of Sphere Medical Ltd., since 2018. Hermann holds a Ph.D. in Biophysics from University of Frankfurt. In addition to global technical industry expertise, Dr. Requardt brings to Gauss significant experience in management and strategic planning.

Pierre Prieux is the founder and president of the Alcen Group (alcen.com), composed of French high-technology companies in the fields of Defense & Security, Energy, Medical & Healthcare, Aeronautics & Space and Large Scientific Instruments. The Alcen Group includes Alsymex S.A., an expert engineering company with particular expertise in magnetic confinement fusion technologies. Pierre Prieux also manages media outlet Connaissancedesenergies.org. He started his career as president of Tabur Marine and of Dufour. At the Matra Group, he managed automotive electronics, robotics, computer-aided design and watchmaking. He also founded and managed telecom operator Kaptech and equipment manufacturer Cirpack. Pierre studied at the Ecole Polytechnique and at INSEAD, both in Paris, France.

Gauss Fusion Initiative – Leading the European Industrialization of Fusion Power - Board of Directors (Beirat)

Dr. Hendrik Hirsch is partner of the global law firm CMS. He advises national and international clients on M&A-transactions and corporate law matters. Hendrik has a specific focus on transactions in the life science and industries sector where he advises strategic as well as financial investors. Hendrik is a member of the executive board of CMS Germany and heads the national sector group Industrials & M&A. Hendrik studied law at Heidelberg University and Carleton University/ Ottawa, Canada. He holds a Ph.D. in law from Heidelberg University.

Davide Malacalza studied Economics and Business Administration at Genoa University. In 1991, Davide joined Sima S.p.A., in 1993 he became Managing Director of Trametal S.p.A., and in 1999 he became Chairman until 2008. Since 2001, Mr. Malacalza has developed ASG Superconductors, including the realization of superconductive magnets for CERN and the ITER Toroidal Field Coils. ASG also offers superconducting technology for energy and the medical sector, developing cables and wire in MgB2, as well as open MRI systems. Davide Malacalza is shareholder and CEO of Hofima and Chairman of ASG Superconductors.

Gauss Fusion Initiative – Leading the European Industrialization of Fusion Power - Strategic & Scientific Advisory Board (SSAB)

Frédérick Bordry is the Chair of the Gauss Fusion Strategic & Scientific Advisory Board (SSAB). Frédérick obtained a PhD in electrical engineering from Institute National Polytechnique de Toulouse - INPT in 1978, he then obtained his State Doctorate in Sciences in the same institution, in 1985, after two years of teaching at Federal University of Santa Catarina (Brazil), he started his career with CERN in 1986. Gaining experience in various positions he was appointed Director for Accelerators and Technology at CERN in 2014, responsible for operation of the CERN accelerator complex, with emphasis on the Large Hadron Collider (LHC) and the development of new projects (post LHC accelerators) and technologies. Frédérick has managed many large projects (annual budget 400 M€) and covering a range of advanced technologies from superconductivity, power conversion, cryogenics, vacuum systems, coatings and surface treatments to complex process control. He has been a long-time advocate for sustainability in energy science. He is main initiator of the workshop "Energy for Sustainable Science at Research Infrastructures" . Since 2021, he has been an honorary member of CERN, advisor to the Director General of CERN and scientific advisor to several institutions, industries and start-ups.

Neil Mitchell serves as advisor to the worldwide largest multinational and national Fusion projects. He earned his PhD at Cambridge University in fluid mechanics. In 1981, he entered fusion in the JET tokamak project. He tested superconductors that became main components of the ITER magnets and participated in development and tests of facilities such as Fenix at LLNL and Sultan at PSI. He has filled several positions within ITER after joining as a founder member in 1988. In 1993, he moved to Naka, Japan as section leader for ITER conductors with successful construction of the Central Solenoid Model Coil (CSMC) in Japan and Toroidal Field Model Coil (TFMC) in Europe. In 2006, Neil became division head for ITER magnets (value ~2000M€), where he finalised magnet design, in-kind agreements with ITER Home Institutes and direct contracts, with several first-of-kind magnets completed, several coils delivered to ITER and the first Poloidal Field (PF) coil in the cryostat. Since January 2020, Neil Mitchell is advisor to the ITER director and advising the EU on the design of a next-generation fusion reactor. In 2021 Dr. Mitchell received the IEEE Award for Continuing Significant Contributions in the Field of Applied Superconductivity.

Professor Günter Janeschitz is an expert in fusion projects with responsibilities in design, cost con-tainment, system integration, and remote handling and maintenance. He received his Diplom-Ingenieur from Technical University Vienna, and his PhD in physics from Atominstitut at the Tech-nical University Vienna in 1983. Following his PhD studies, he had various roles at IPP Garching and then spent 7 months with General Atomics in San Diego. In 1989, he joined the JET program until 1993. From 1996 until 2002 he was Head of Divertor and Plasma Interface Division of ITER, re-sponsible for Divertor and Edge plasma physics, Engineering, Remote Maintenance, Refurbishment in the Hot Cell, Diagnostic Integration, Pumping and Fueling Systems design, and Leak Checking design. Günter Janeschitz then became Head of the Fusion Program at the Research Center Karlsruhe (now KIT). Between 2006 and 2008 he was Coordinator for the worldwide ITER design review. He moved to ITER in 2008 and has been Deputy Head of the ITER Central Integration Office from 2015 to 2017. After his retirement from ITER, he became a Consultant to Eurofusion with focus on Remote Maintenance. Since 2020 Günter is Senior advisor to Design Division Heat in DEMO, with in-volvement in Remote Handling and integration issues.

Gauss Fusion Initiative – Leading the European Industrialization of Fusion Power - Strategic & Scientific Advisory Board (SSAB)

Christoph Quitmann has more than 30 years of experience in large research projects. He obtained his PhD from RWTH-Aachen in 1993 on charge transport in high-temperature superconductors. For the following decade he used X-rays generated at synchrotrons for microscopy and spectroscopy of superconductors and magnetic materials in the US, Germany, and Switzerland. In the early 2000s, he started building beamlines for state-of-the-art research as head of the Laboratory for Materials Science at Paul Scherrer Institut (CH). From 2012, he led building and commissioning of the first 4th generation synchrotron, MAX IV and became a professor of physics at Lund University, Sweden. Christoph is now a director of RI – Research Instruments (D), working on an industrial high-power superconducting electron accelerator to produce medical isotopes. He is member of the Swedish Royal Academy of Science and has advised national labs, universities and funding institutions around the globe on scientific, technical, and strategic aspects of large research projects.

Norbert Holtkamp was SLAC National Accelerator Laboratory, Deputy Director, 2014-2022. He is Professor in Photon Science and Particle Physics & Astrophysics at Stanford University since 2010. Strategic initiatives aligned with Department of Energy and portfolio includes >$2.0B construction at SLAC. Associate Laboratory Director for Accelerator Directorate at SLAC 2010-2014 with goal to operate effective organization to provide high quality services to lead Accelerator Directorate into sustainable future with SLAC. Norbert holds a M.S. in physics from University of Berlin and a Ph.D. in physics from Technical University in Darmstadt. Research interests include synchrotron radiation and neutron sources, fusion, high-energy colliders, linear accelerators, storage rings and accelerator-based neutrino physics. Involved in research, conception and construction on variety of projects and served on US DOE and National Science Foundation committees on Linear Colliders, Neutrino Factories and Neutrino beams, Synchrotron Radiation and XFEL designs, as well as high energy colliders. Member of HEPAP sub-panel on long-range planning in high-energy physics in 2001/2002 and International Technology Recommendation Panel (ITRP) which recommended superconducting technology for a Linear Collider. Advisory panel for High Energy Physics at National Academy of Science (EPP 2010). Chaired Particle Accelerator Conference in 2005, and Linac Conference in 2006. June 2008 Gersh Budker prize of European Physical Society for significant contribution to accelerator field with success of SNS project. In April 2006, nominated as **Principal Deputy Director of ITER**, original project with duration ten years and 15 billion Euro. Since January 2001, director of Accelerator Systems Division for Spallation Neutron Source (SNS) at Oak Ridge National Laboratory (ORNL), a Pulsed Neutron Source that can provide 1-3 MW of average beam power.

Jean Jacquinot, PhD in Physics, started research on plasma confinement and heating in the French CEA fusion laboratory. He then joined the JET (Joint European Torus) for 18 years, first to create the RF heating division and then as JET Associate Director for tokamak operations, culminating with the 1997 DT phase when record fusion power was achieved. Jean became Director of JET in 1999. From 2000-2005, Jean was Director of fusion in CEA, operating the Tore Supra tokamak and initiating ITER in Cadarache. Since 2006, Jean was Senior Adviser to Bernard Bigot, the late ITER DG, and Jean is also a scientific advisor of CEA. In 2018, Jean was elected Chairman of the Fusion Power Coordinating Committee (FPCC) of the International Energy Agency (IEA). Dr. Jacquinot is Chevalier in the French national order of ''Mérite'' and Chevalier in the order of ''La Légion d'Honneur''.

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TO BE CONFIRMED as **Deputy Chair** of Gauss Fusion SSAB: Hartmut Zohm, Max Planck Institute for Plasma Physics (IPP): Scientific Fellow of IPP and Head of Tokamak Scenario Development Division since 1999. After studying physics at Karlsruhe, Hartmut worked for his PhD at IPP from 1988 till 1990. For his thesis "Investigation of Magnetic Modes in ASDEX Tokamak", he was awarded the Otto Hahn Medal in 1991 by the Max Planck Society. After a stay with General Atomics in San Diego, he became a lecturer in experimental physics in 1996 at University of Augsburg, and Professor of Electrical Engineering and Plasma Research at University of Stuttgart. In 1999, he returned to IPP as Scientific Fellow. Since 2002 he is Honorary Professor at Ludwig-Maximilians University Munich. In 2014 he was awarded the John Dawson Award for Excellence in Plasma Physics Research by the American Physical Society; in 2016 he received the Hannes Alfvén Prize of the European Physical Society. Hartmut Zohm has been a Fellow of the American Physical Society since 2016.

TO BE CONFIRMED Prof. Robert Stieglitz is Head of the Institute for Neutron Physics and Reactor Technology and Chair of Fusion and Reactor Technology at the Institute of Applied Thermofluidics at KIT Karlsruhe, Germany.
Robert Stieglitz received his Diploma from University of Karlsruhe, spent 2 years in industry as project engineer in nuclear decommissioning and cryo-systems. For his PhD in fusion he returned to Karlsruhe University. During his research career he had stays at Argonne National Laboratory (USA) and Paul Scherrer Institute, Switzerland. He is advisor to the Alexander v. Humboldt Foundation since 2004, Deutsche Forschungsgemeinschaft (DFG) since 2005, Fusion Innovation Industry Forum (FIIF) since 2009, German Nuclear Reactor Safety Commission up to 2015, acted as Project Board Chair EUROfusion WP Safety and Environment from 2014-2018. Since 2009 he holds his current positions and serves as Director of the CEA/KIT Frederic Joliot-Otto Hahn School on nuclear Reactors.