

*****Conference Programme and ZOOM Links on next pages*****

How to use the Zoom meeting

- **Keep your microphone on mute.** Only speakers should have their microphones unmuted during their presentation.
- Via the “Participants” list you can “raise your hand” if you wish to say something. The moderator can then unmute you.
- The **Chat function**, which you can also activate by clicking “Chat” at the bottom on your screen, allows you to ask questions in writing. You can either talk to the entire group or send private messages to individual participants.
- **Presenters should open their presentation first** (on their own computer) and can then **share their screen** via the green button at the bottom of the Zoom programme and subsequently select the window they’d like to share (PowerPoint, Acrobat, ...)
- Should you be **disconnected**, simply **rejoin**.

Zoom troubleshooting:

<https://support.zoom.us/hc/en-us/sections/200305593-Troubleshooting>

The screenshot shows the Zoom meeting interface with several annotations:

- Audio and Video Controls:** A green arrow points to the bottom toolbar containing Mute, Start Video, Security, Participants, Chat, Share Screen, Record, and End buttons.
- Join Audio:** A red arrow points to the "Join Audio" button (Computer Audio Connected).
- Share Screen:** A red arrow points to the "Share Screen" button.
- Participants List:** A blue arrow points to the "Participants" button in the bottom toolbar.
- Chat Window:** A blue arrow points to the "Zoom Group Chat" window on the right side of the screen.
- Presenters share their screen here! Afterwards select presentation.** A red arrow points to the "Share Screen" button.
- Select whether you want to talk to the entire room or just one person** A blue arrow points to the "To: Everyone" dropdown menu in the chat window.

The meeting details on the left side of the screen are:

- Meeting Topic: Thomas Nagel's Zoom Meeting
- Host: Thomas Nagel
- Password: 079203
- Invitation URL: <https://us02web.zoom.us/j/83658926100?pwd=UmFQNksvNDVoRmRdVnVQVMwNUNHUT09>
- Participant ID: 191315

Programme for the Web Meeting of the EGU Session

“Towards a safe nuclear waste repository – assessment of barrier integrity, geoscientific, technological, societal and regulatory challenges and approaches”

May 4th, 2020

Link to abstracts, posters and presentations:

<https://meetingorganizer.copernicus.org/EGU2020/displays/34732>

08:30 – 12:00: Presentation Block: 12+3 minutes each

Join the Zoom-Meeting:

<https://us02web.zoom.us/j/84859925223?pwd=RklJVGxZY055VlFaOWpnb0tWcTIRZz09>

Meeting-ID: 848 5992 5223

Password: 648697

Dial-in numbers by phone available depending on your location:

<https://us02web.zoom.us/j/keG8gecbA6>

08:20 - 08:30	Session opening
08:30 – 08:45 confirmed	D991 EGU2020-2474 2019 Performance Assessment Calculations for the Recertification of the Waste Isolation Pilot Plant Todd Zeitler , James Bethune, Sarah Brunell, Dwayne Kicker, and Jennifer Long
08:45 – 09:00 confirmed	D994 EGU2020-3191 Investigating the Temperature Limits of Bentonite Backfilled Repositories: Coupled THMC Modeling, Lab Mockup Testing and Field Experiments Jens Birkholzer , Liange Zheng, Jonny Rutqvist, Sharon Borglin, Chun Chang, Chunwei Chou, Yuxin Wu, and Tim Kneafsey
09:00 – 09:15 confirmed	D995 EGU2020-3336 Which Processes could define Temperature Limits on the Outer Surface of a Container in a Disposal Facility ? Guido Bracke, Eva Hartwig-Thurat, Jürgen Larue, Artur Meleshyn, Torben Weyand, and Ingo Kock
09:15-09:30 Confirmed	D1005 EGU2020-5705 Reservoir Response to Heat Generating Nuclear Waste Disposal in Bedded Salt Richard Jayne and Kristopher Kuhlman

<p>09:30 – 09:45</p> <p>confirmed</p>	<p>D992 EGU2020-2300</p> <p><u>The role of microorganisms in the bentonite barrier of high-level radioactive waste repositories</u></p> <p>Nicole Matschiavelli, Magdalena Dressler, Tom Neubert, Sindy Kluge, Ariette Schierz, and Andrea Cherkouk</p>
<p>09:45 – 10:00</p> <p>confirmed</p>	<p>D993 EGU2020-3966</p> <p><u>Biogenic safety of clay barrier materials for radioactive waste repository database</u></p> <p>Alexey Safonov, Nadezhda Popova, Elena Spirina, Elena Abramova, Nadezhda Philippova, Victoria Jarkova, and Kirill Boldyrev</p>
<p>10:00 – 10:15</p> <p>confirmed</p>	<p>D996 EGU2020-6079</p> <p><u>Near field evolution of a spent fuel repository in an argillaceous rock formation and impact on radionuclide migration</u></p> <p>Vanessa Montoya, Orlando Silva, Emilie Coene, Jorge Molinero, Renchao Lu, Haibing Shao, and Olaf Kolditz</p>
<p>10:15 – 10:30</p> <p>confirmed</p>	<p>D998 EGU2020-7013</p> <p><u>Sorption of trivalent actinides (Cm, Am) and their rare earth analogues (Lu, Y, Eu, Nd, La) onto orthoclase: Batch experiments, Time-Resolved Laser Fluorescence Spectroscopy (TRLFS) and Surface Complexation Modeling (SCM)</u></p> <p>Hannes Brinkmann, Julia Neumann, Susan Britz, Vinzenz Brendler, Thorsten Stumpf, and Moritz Schmidt</p>

<p>10:30 – 10:45</p> <p>confirmed</p>	<p>D999 EGU2020-4606</p> <p><u>Comparative Study of Alternative Binders for Concrete Sealing Structures in Rock Salt</u></p> <p>Patrick Sturm, Gregor Gluth, Janis Moye, Solen Garel, and Hans-Carsten Kühne</p>
<p>10:45 – 11:00</p> <p>confirmed</p>	<p>D1000 EGU2020-12948</p> <p><u>Investigations on the permeability of MgO concrete with 5-1-8 phase at the GV2-drift-sealing in the Teutschenthal mine</u></p> <p>Jennifer Arendt, Wolfram Kudla, Thomas Wilsnack, Till Popp, and Daniela Freyer</p>
<p>11:00 – 11:15</p> <p>confirmed</p>	<p>D1001 EGU2020-20326</p> <p><u>Evaluation of crystalline rock pore water geochemistry in DGR conditions</u></p> <p>Václava Havlová, Milan Zuna, Anna Pecková, and Filip Jankovský</p>
<p>11:15 – 11:30</p> <p>confirmed</p>	<p>D1002 EGU2020-21509</p> <p><u>3D hydrogeological modeling of Deep Geological Disposal in the Nizhnokansky Rock massif</u></p> <p>Georgii Neuvazhaev, Alexander Rastorguev, Oleg Morozov, Ivan Kapyrin, and Fedor Grigorev</p>

11:30 – 11:45 confirmed	D990 EGU2020-12231 Learning from 1 billion year old copper Desmond Moser , James Noël, Anna Dobkowska, Dmitrij Zagidulin, Jessica Perritt, Peter Keech, Mehran Behazin, Jeff Binns, Gabriel Arcuri, and Brian Langelier
11:45 – 12:00	
12:00 – 12:30	Closing the Oral Block and moving over to the break

14:00 - 15:30: Pitch Presentation Block: 3 minutes each, followed by small-group discussions (until 17:00)

Join the Zoom-Meeting:

<https://us02web.zoom.us/j/84853639825?pwd=MHVMcEF6RkV3d3BYeTdYUFB0WUJGUT09>

Meeting-ID: 848 5363 9825

Password: 698113

Dial-in numbers by phone available depending on your location:

<https://us02web.zoom.us/j/kwAFr2XLx>

<p>1</p> <p>confirmed</p>	<p>D1004 EGU2020-1578</p> <p><u>Geochemically coupled 2D models reproduce the formation of transition zones within potash seams</u></p> <p>Svenja Steding, Thomas Kempka, Axel Zirkler, and Michael Kühn</p>
<p>3</p> <p>confirmed</p>	<p>D1006 EGU2020-9314</p> <p><u>In-situ Experiment on the Influence of Humidity on the Cyclic and Long-Term Deformation Behavior (CD-A) of the Opalinus Clay at the Mont Terri Rock Laboratory, Switzerland: Excavation of the Twin Niches, First Measurements, Simulations and Analysis</u></p> <p>Jobst Maßmann, Gesa Ziefle, Stephan Costabel, Markus Furche, Bastian Graupner, Jürgen Hesser, David Jaeggi, Franz Königer, Karsten Rink, Rainer Schuhmann, Bernhard Vowinckel, and Klaus Wieczorek</p>
<p>4</p> <p>withdrawn</p>	<p>D1007 EGU2020-9654</p> <p><u>Microbial activity in nuclear waste repository systems</u></p> <p>Johannes Raff, Margarita Lopez-Fernandez, Stephan Hilpmann, Sindy Kluge, Robin Steudtner, and Andrea Cherkouk</p>

<p>5</p>	<p>D1008 EGU2020-13709</p> <p><u>The effect of the cooling on a dry storage cask for spent nuclear fuel by different wind speed</u></p> <p>LinYing Cheng and Chi-Ming Lai</p>
<p>6</p>	<p>D1009 EGU2020-16928</p> <p><u>The SpannEnD Project - Numerical modelling of the 3D stress state of Germany</u></p> <p>Steffen Ahlers, Luisa Röckel, Andreas Henk, Karsten Reiter, Tobias Hergert, Birgit Müller, Frank Schilling, Oliver Heidbach, Sophia Morawietz, Magdalena Scheck-Wenderoth, and Denis Anikiev</p>
<p>7</p> <p>confirmed</p>	<p>D1010 EGU2020-14981</p> <p><u>Sensitivity analysis for numerical modeling of a generic repository for nuclear waste in bedded salt</u></p> <p>Wenting Liu, Ralf Eickemeier, and Sandra Fahland</p>
<p>8</p> <p>confirmed</p>	<p>D1011 EGU2020-17898</p> <p><u>Transferring geo-/mineralogical information to THM simulations of HLW storage in claystone formations (BASTION II)</u></p> <p>Vinay Kumar, Tilo Kneuker, and Jobst Maßmann</p>

<p>9</p> <p>confirmed</p>	<p>D1012 EGU2020-17712</p> <p><u>Impacts of changing conditions on far-field radionuclide evolution: background and goals of a newly funded DFG-RFBR project.</u></p> <p>Fabien Magri, Thomas Nagel, Axel Liebscher, and Victor Malkovsky</p>
<p>10</p>	<p>D1013 EGU2020-19178</p> <p><u>Experimental study on the thermo- and hydro- properties of two bentonites as buffer materials</u></p> <p>Wei-Hsing Huang</p>
<p>11</p> <p>confirmed</p>	<p>D1014 EGU2020-19441</p> <p><u>Experimental assessment of interaction between boric acid enriched in boron-10 and cementitious matrix</u></p> <p>Mojtaba Rostamiparsa, Zsuzsanna Szabó-Krausz, Margit Fábián, György Falus, Csaba Szabó, and Péter Völgyesi</p>
<p>12</p> <p>withdrawn</p>	<p>D1015 EGU2020-20210</p> <p><u>Criteria of fault selection for geomechanical models</u></p> <p>Luisa Röckel, Steffen Ahlers, Sophia Morawietz, Karsten Reiter, and Birgit Müller and the The SpannEnD Team</p>
<p>13</p> <p>confirmed</p>	<p>D1016 EGU2020-20302</p> <p><u>State of the scientific and technical knowledge about limiting temperatures in the Repository Site Selection process of Germany with simultaneous consideration to Europe and other European repository concepts</u></p> <p>Ute Maurer-Rurack, Axel Liebscher, and Fabien Magri</p>

<p>14</p> <p>confirmed</p>	<p>D1017 EGU2020-19930</p> <p><u>Creating a generic model of a high level waste (HLW) repository in crystalline rock and determining hydraulic parameters to investigate minimum requirements to the host rock for a safe storage location according to national German law</u></p> <p>Sarah Weihmann and Jobst Maßmann</p>
<p>15</p> <p>confirmed</p>	<p>D1018 EGU2020-22601</p> <p><u>Towards best possible safety - Current regulatory research for the German site selection process for high-level radioactive waste disposal</u></p> <p>Axel Liebscher, Christoph Borkel, Ute Maurer-Rurack, and Michael Jendras</p>
<p>16</p> <p>confirmed</p>	<p>D1019 EGU2020-22535</p> <p><u>Sensitivity analyses and uncertainty quantification in THM models: a benchmark study</u></p> <p>Jörg Buchwald, Aqeel Chaudhry, Keita Yoshioka, Olaf Kolditz, and Thomas Nagel</p>
<p>17</p>	<p>D1020 EGU2020-21147</p> <p><u>Hydrogeological characteristics of candidate sites for high-level waste disposal in South Korea</u></p> <p>Jinyoung Park, Kyoungtae Ko, Minhee Lee, and Minjune Yang</p>

18	<p>D1021 EGU2020-2821</p> <p><u>Quantification and Reduction of Uncertainties in 3D Stress Models</u></p> <p>Moritz Ziegler and Oliver Heidbach</p>
19	<p>D1022 EGU2020-4078</p> <p><u>Cs batch sorption and column transport experiments on sand from the Yamin plain, Israel – Experimental results and modelling</u></p> <p>Ofra Klein-BenDavid, Noa Balaban, Svetlana Gelfer, Ronen Komerian, David Saban, and Ravid Rosenzweig</p>
20 confirmed	<p>D1023 EGU2020-5738</p> <p><u>Monitoring and Retrieval of High-Level Radioactive Waste</u></p> <p>Volker Mintzlaff and Joachim Stahlmann</p>
21 confirmed	<p>D1024 EGU2020-5936</p> <p><u>Impact of deposition borehole geometry on mechanical spalling in nuclear waste repositories</u></p> <p>Maria Cristina Saceanu, Adriana Paluszny, Robert Zimmerman, and Diego Mas Ivars</p>
22	<p>D1025 EGU2020-6413</p> <p><u>Corrosion study of low carbon steel under simulated geological disposal environments for HLW in China</u></p> <p>Junhua Dong</p>

<p>23</p>	<p>D1026 EGU2020-7897</p> <p><u>Large-scale tests to investigate MgO concrete with a long-term stable 3-1-8 phase in the Sondershausen and Teutschenthal mines</u></p> <p>Jan Aurich, Daniela Freyer, Matthias Gruner, and Wolfram Kudla</p>
<p>24</p> <p>confirmed</p>	<p>D1027 EGU2020-10772</p> <p><u>Immobilization of uranium by phosphate and carbonate crystallization as an improvement of engineering barriers.</u></p> <p>Rinat Gabitov, Artas Migdisov, Nguyen Anh, Jimenez Angel, Van Hartesveldt Noah, Perez-Huerta Alberto, Sadekov Aleksey, Sauer Kirsten, Baker Jason, Paul Varun, Caporuscio Florie, Xu Hongwu, and Roback Robert</p>
<p>25</p> <p>withdrawn</p>	<p>D1028 EGU2020-13981</p> <p><u>Assessment of effective infiltration in the deep arid vadose zone of the Negev, Israel</u></p> <p>Noa Balaban, Ravid Rosenzweig, Philip Stauffer, Ofra Klein-BenDavid, Avraham Dody, Ran Galvo, Stephen Kuluris, and Gilles Bussod</p>
<p>26</p> <p>confirmed</p>	<p>D1029 EGU2020-20522</p> <p><u>Methodology of preliminary safety assessments in the site selection procedure in Germany</u></p> <p>Wolfram Rühaak, Phillip Kreye, Eva-Maria Hoyer, Johanna Wolf, Florian Panitz, and Dennis Gawletta</p>

<p>27</p> <p>confirmed</p>	<p>D1030 EGU2020-20570</p> <p>Methods for in-situ HM characterization of claystone at the Mont Terri Rock Laboratory</p> <p>Sina Hale, Xavier Ries, David Jaeggi, and Philipp Blum</p>
<p>28</p> <p>withdrawn</p>	<p>D1031 EGU2020-22481</p> <p>A novel hydro-mechanical model for swelling of argillaceous material</p> <p>Antonia Nitsch, Jan Machacek, Julia Leuthold, Carlos Grandas Tavera, and Torsten Wichtmann</p>
<p>15:30 – 17:00</p>	<p>Open discussion</p>