

	Monday 8 <sup>th</sup> December	Tuesday 9 <sup>th</sup> December	Wednesday 10 <sup>th</sup> December	Thursday 11 <sup>th</sup> December	Friday 12 <sup>th</sup> December	
Chairpersons		M. McNamara & M. Wuttke	M. Archer & T. Lehmann	F. Grímsson & T. Wappler	M.A Gandolfo & D. Uhl	
8:00		Conference Office Open	Conference Office Open	Conference Office Open	Conference Office Open	
9:00		Welcome Address	M. Archer et al.	F. Grímsson	M.A. Gandolfo	
		M. McNamara	S. V. Jung & M. Hörnig	C. Geier et al.	K. Gernelle et al.	
10:00		D. Falk et al.	J. Turner & N.J. Butterfield	L. Boudet et al.	T. Smith & J. Tissier	
10:30		Coffee Break	Coffee Break	Coffee Break	Coffee Break	
11:00		M. Wuttke & F. Grandi	Y. Rollot et al.	A.V. Demers-Potvin et al.	R. Weppe et al.	
			T.J. Churchill et al.	T. Wappler	S. Wedmann & D. Yeates	
		M. Colombo	A. Folie & T. Smith	M.E. Collinson & T. Lehmann	M. Rabi et al.	
12:00		Group Photo	T. Lehmann & I. Ruf	A. Zippel et al.	L. Elbaz & H. Zaher	
12:20		Lunch	Lunch	Lunch	Lunch	
Chairpersons			M.S. Engel & S. Wedmann	M.T. Silcox & R.A. Racicot	S. Kaboth-Bahr & K. T. Smith	
13:30		Poster Session	M.S. Engel	M.T. Silcox	W. Konrad & A. Roth-Nebelsick	
					L. Kunzmann & V. Wilde	
			H. Jiang et al.	R. A. Racicot	T. Tütken et al.	
			C.T. Gee & D.W. Taylor	M.J. Mourlam et al.	K.T. Smith	
15:00		Coffee Break	Coffee Break	Coffee Break	Coffee Break	
15:30		Poster Session	C. Siegert	D. Mietchen	Guided Tour Special Exhibition	
			A. Richter	G.L. Georgalis		
16:00			J. Tissier et al.	Guided Tour Special Exhibition	Public Lecture S. Kaboth-Bahr	
16:30		Conference Office Closed	Conference Office Closed	Conference Office Closed		
17:00					Conference Office Closed	
18:30	Ice-Breaker Party	Reception in the Römer	Public Panel-Discussion			
19:00					Conference Dinner	
ca. 21:30						



**Jügelhaus**

Mertonstrasse 17

Festsaal

**Main Building**

Senckenberganlage 25

Senckenbergmuseum,  
1. Lichthof

**Arthur-von-Weinberg-Building**

Robert-Mayer-Strasse 2

Grüner Hörsaal

Bridge

entrance

**INFORMATION CONCERNING THE EVENT IN THE „RÖMER“, 9<sup>TH</sup> DECEMBER**

The “Römer” is Frankfurt’s historic city hall, located in the heart of the old town. The medieval building complex has served as Frankfurt’s town hall for centuries.

The Mayor and the Executive Board of the City of Frankfurt invite the participants of the Messel-Conference to attend a **reception in the Imperial Hall of the Frankfurt Römer at 18:30** on Tuesday, 9 December 2025, followed by drinks.

Address: **Römerberg 23, 60311 Frankfurt am Main, Germany**

**Please bring:**

It is important that you bring a valid **official photo ID** (like German identity card, or passport) together with the **invitation card** which you got together with the other information material in your conference bag when checking in. The invitation is valid for 2 persons.

**Please do not bring:**

Large bags (bigger than DIN A4/letter size) are not permitted.

**Travel directions,**

**from the Senckenberg Museum:** use the subway station „Bockenheimer Warte“ to catch the U4 (direction „Seckbacher Landstraße“ respectively „Enkheim“) ⇒ exit at station „Dom/Römer“

**from the Hotel Mercure:** use the Tramway station „Kuhwaldstraße“ Tram 17 (direction „Neu Isenburg“), change at Tram/Subway Station „Festhalle/Messe“ to catch the U4 (direction „Seckbacher Landstraße“ respectively „Enkheim“) ⇒ exit at station „Dom/Römer“

**Alternatives from the city center:** Subway U5, Trams 11, 12 and 14 make a stop at the „Dom/Römer“ respectively Römer/Paulskiche Station.

**Please let us know if you need a ticket for public transport for the trip to the Römer by Tuesday at noon.**

Admission to the Römer opens at 18:00 and the reception will end by 20:00. After the event you may want to stay at the plaza and enjoy the Christmas Market of Frankfurt which is open till 21:00.



MONDAY, 8. DECEMBER 2025

18:30 Ice Breaker Party at the Senckenberg Museum

TUESDAY, 9. DECEMBER 2025

Chairpersons: Maria McNamara & Michael Wuttke

- 8:00 Conference Office Open
- 9:00 Welcome Addresses
- 9:25 **Keynote** Maria McNamara: A new chapter in fossil melanin research: Applications to understanding vertebrate evolution
- 10:10 Daniel Falk, et al.: Comparative taphonomy of anurans reveal controls on anuran preservation and insights into the evolution of melanosomes
- 10:30 **Break**
- 11:00 Michael Wuttke, Federica Grandi: Forensic taphonomy of large mammals from different Maar-Lagerstätten as a tool for elucidating the link between a living community and the fossils lying in a drawer - Insights and open questions
- 11:40 Marco Colombo, et al.: Analysis of tissue-specific chemical signals in fossil vertebrates from Messel using mobile-MA-XRF Technology
- 12:00 Group Photo
- 12:20 **Lunch**
- 13:30 Poster Session
- 15:00 **Break**
- 15:30 Poster Session
- 16:30 **Conference Office Closed**
- 18:30 **Reception at the „Römer“**

Session 1: Taphonomy

WEDNESDAY, 10. DECEMBER 2025

**Chairpersons: Michael Archer & Thomas Lehmann**

- 8:00 Conference Office Open
- 9:00 **Keynote** Michael Archer, et al.: Australia's enigmatic Eocene mammals from Murgon and the potential for Riversleigh's World Heritage Fossil Deposits to subvert extinction
- 9:50 Swane V. Jung, Marie K. Hörnig: Overlooked and mistaken - eggs and seeds in Eocene amber
- 10:10 Joshua Turner, Nicholas J. Butterfield: Paleoecological analysis of exceptionally preserved Miocene lake system with parallels to Messel
- 10:30 **Break**
- 11:00 Yann Rollot, et al.: Redescription of *Allaeochelys crassesculpta* from the Eocene Messel Pit, Germany and new insights into the anatomy, paleoecology, and phylogeny of carettochelyid turtles
- 11:20 Timothy J. Churchill, et al.: Three new members of Australia's oldest marsupial order (Keeunamorphia, Metatheria) from the early Miocene deposits of the Riversleigh World Heritage Area, northwestern Queensland
- 11:40 Annelise Folie, Thierry Smith: The bioersivity of the Eocene Messel vertebrates based on the Belgian collection
- 12:00 Thomas Lehmann, I. Ruf: The parable of the prodigal family: First record of Nyctitheriidae from the Messel Pit Fossil Site
- 12:20 **Lunch**

**Chairpersons: Michael Engel & Sonja Wedmann**

- 13:30 **Keynote** Michael S. Engel: The once and future earth: Insect community diversity in a fading global greenhouse
- 14:15 Hui Jiang, et al.: A singing cicada from the Eocene Messel Pit, Germany, reveals an earlier origin of Platyleurini
- 14:35 Carole T. Gee, David W. Taylor: An odd suite of characters in an ancient water lily fruit from the Eocene Lake Messel: Preliminary insights into flower characters, fruit morphology, relationship to seeds, pollen, and leaves
- 15:00 **Break**
- 15:30 Caroline Siegert: Hemispheric disparities in Eocene temperate floras: A paleobotanical comparison between the Huitrera Formation (Argentine, Patagonia) and the Green River Formation (USA)
- 15:50 Adrian Richter: Scanning the past – Revealing ancient diversity through micro-CT scanning
- 16:10 Jérémy Tissier, et al.: Tomography of three articulated perissodactyl skeletons from Messel
- 16:30 **Conference Office Closed**
- 18:30 **Public Panel - Discussion (in German): Die bewegte Geschichte der Grube Messel: Vom Bergbau zum UNESCO-Welterbe at the Senckenberg Festsaal (Jügelhaus)**

Session 2: Life & Reproduction

Session 3: Organismic Diversity

THURSDAY, 11. DECEMBER 2025

**Chairpersons: Friðgeir Grímsson & Torsten Wappler**

- 8:00 Conference Office Open
- 9:00 **Keynote** Friðgeir Grímsson: Pollen in the spotlight: Fossil evidence for the intimate interactions between flowers and animals
- 9:50 Christian Geier, et al.: Paleo-pollination by Hymenoptera in the Paleogene of Europe
- 10:10 Loup Boudet, et al.: Scoliid wasps from the Eocene of Messel: Pollinivory and pollination
- 10:30 **Break**
- 11:00 Alexandre V. Demers-Potvin, et al.: Increasing the Messel food web's complexity into the next quarter-century
- 11:20 Torsten Wappler: 30 years of active research on plant insect interactions - What's next?
- 11:40 Margaret E. Collinson, Thomas Lehmann: Gut contents of the rodent *Masillamys* from the Messel oil shale
- 12:00 Ana Zippel, et al.: Deconstructed Eocene Baltic forests: What types of wood and fungi did insect larvae feed upon based on amber inclusions?
- 12:20 **Lunch**

Session 4: Interspecific Interaction

**Chairpersons: Mary T. Silcox & Rachel A. Racicot**

- 13:30 **Keynote** Mary T. Silcox: Cracking open the doors of perception: Attempts to reconstruct sensory variables for extinct primates and their kin
- 14:15 Rachel A. Racicot: Sensory capabilities in Messel bats
- 14:35 Mickaël J. Mourlam, et al.: The auditory region of *Masillabune martini* (Artiodactyla: Choeropotamidae), phylogenetic and paleoecological insights
- 15:00 **Break**
- 15:30 Daniel Mietchen: Connecting paleosciences and society: How Wikimedia platforms facilitate global engagement with the Messel Pit's scientific dimensions
- 15:50 Georgios L. Georgalis: Eocene snakes from the phosphorites du Quercy, France – Towards a comprehensive approach of their taxonomy, diversity, and anatomy
- 16:15 **Guided Tour to the special exhibition "It's pretty warm here! Life and death in Messel"**  
Registration is required to attend. Please register in the Conference Office.
- 16:30 **Conference Office Closed**
- 19:00 **Conference-Dinner at the Senckenberg Museum**

S5: Sensory Systems

Open Topic

FRIDAY, 12. DECEMBER 2025

**Chairpersons: Maria A. Gandolfo & Dieter Uhl**

- 8:00 Conference Office Open
- 9:00 **Keynote** Maria A. Gandolfo: Eocene eden: Forests of the ancient southern continents
- 9:50 Killian Gernelle, et al.: Tiny pouched colonizers growing larger: An evolutionary history of Eurasian herpetotheriid metatherians in the Eocene
- 10:10 Thierry Smith, Jérémy Tissier: Do diversification and dispersals of early Eocene Perissodactyls differ from those of other modern mammals?
- 10:30 **Break**
- 11:00 Romain Weppe, et al.: The 'Grande Coupure' in southern France at the Eocene-Oligocene transition
- 11:20 Sonja Wedmann, David Yeates: Fossil bee flies (Diptera, Bombyliidae) from Messel – An(other) Australian connection
- 11:40 Márton Rabi, et al.: Diversity and historical biogeography of Messel and Geiseltal crocodyliformes
- 12:00 Lazare Elbaz, Hussam Zaher: The fossil snake assemblage from the Ypresian locality of Prémontéré (Early Eocene, Paris Basin, France)
- 12:20 **Lunch**

**Chairpersons: Stefanie Kaboth-Bahr & Krister T. Smith**

- 13:30 Wilfried Konrad, Anita Roth-Nebelsick: CO<sub>2</sub> reconstruction and other palaeoecological analyses with fossil plants from Messel
- 13:50 Lutz Kunzmann, Volker Wilde: Long-ranging fossil-species of the Messel flora and their adaptive capacity to climate change
- 14:10 Thomas Tütken, et al.: Isotope compositions of horse teeth from Messel: New insights into palaeoclimate, pCO<sub>2</sub> and landscape use
- 14:30 Krister T. Smith: Was there really an Eocene hothouse?
- 15:00 **Break**
- 15:15 **Guided Tour to the special exhibition "It's pretty warm here! Life and death in Messel"**  
Registration is required to attend. Please register in the Conference Office.
- 16:00 **Public Keynote lecture** Stefanie Kaboth-Bahr: Echoes of the Eocene: Climate lessons from Messel and Earth's last Greenhouse World
- 17:00 **Conference Office Closed**

Session 6: Biogeography

Session 7: Terrestrial Palaeoclimate

SATURDAY, 13. DECEMBER 2025

- 9:00 Departure by bus in front of the museum entrance (only with registration)  
If you are driving yourselves, please come to the parking lot at the visitor center (Roßdörfer Strasse 108, 64409 Messel).
- 10:00 Guided tour of the Messel Pit
- 12:30 **Lunch**
- 14:00 Departure by bus in front of the visitor center
- 15:00 Arrival in Frankfurt at the museum
  
- 14:00 **Workshop** (For prearranged participants only)
- 17:00 Departure back to Frankfurt  
Arrival in Frankfurt at the museum at 17:45

EXCURSION



Winter landscape in the Messel Pit Fossil Site (photo: B. Behr)

## LIST OF POSTERS

- Mirco Alberti  
LONG-TERM GEOTECHNICAL MONITORING IN THE MESSEL PIT  
WORLD HERITAGE SITE
- Andrés Alfonso-Rojas,  
et al.  
SNAKES, CROCS, AND TURTLES: A NEW COLOMBIAN FOSSIL  
SITE ILLUMINATES VERTEBRATE DIVERSITY ACROSS THE  
PALEOCENE–EOCENE TRANSITION
- Sergio Álvarez-Parra,  
et al.  
A CRETACEOUS HOTSPOT OF RESIN MASS PRODUCTION:  
TAPHONOMY AND PALEOECOLOGY OF THE AMBER OUTCROPS  
IN EASTERN SPAIN
- Loup Boudet,  
et al.  
MAJESTIES AMONG THE INSECTS – NEW CROWN WASPS  
(HYMENOPTERA: STEPHANIDAE) FROM THE EOCENE MESSEL PIT
- Killian Gernelle,  
et al.  
A COMPREHENSIVE EVOLUTIONARY HISTORY OF PERADECTIDAE  
(METATHERIA) REVEALED BY A NEW PHYLOGENETIC  
FRAMEWORK BASED ON DENTAL MORPHOLOGY
- Paul Gola,  
et al.  
A COMPARISON OF THE INNER EAR OF *HASSIANYCTERIS* WITH  
EXTANT BATS
- Thorben P. W. Grohrock  
& Márton Rabi  
SYMPATRIC SPECIATION IN THE MESSEL MAAR LAKE? A CASE  
STUDY ON *DIPLOCYNODON* CROCODYLIFORMS
- Sarah Heidekorn,  
et al.  
INNER EAR MORPHOLOGY AND INFERRED ECOLOGICAL  
ADAPTATIONS OF *BUXOLESTES PISCATOR* (CIMOLESTA,  
PANTOLESTIDAE)
- Wighart v. Koenigswald,  
et al.  
EXTRAORDINARY OCCLUSION OF CANINIFORMS IN THE  
ARTIODACTYL *MASILLABUNE* FROM MESSEL
- Louise U. Kurz,  
et al.  
THE DENTITION OF THE THREE *LEPTICTIDIUM* SPECIES FROM  
THE MESSEL PIT (EOCENE) – FUNCTIONAL RECONSTRUCTIONS  
AND COMPARISONS
- Maëva J. Orliac,  
et al.  
UNDERSTANDING THE EXCEPTIONAL FOSSILISATION OF THE  
MUMMIES FROM THE QUERCY LAGERSTÄTTE
- Marie Sophie Pansegrau  
& Rachel A. Racicot  
ECHOES FROM THE EOCENE: WHAT VIRTUAL ENDOCASTS OF THE  
BONY LABYRINTH CAN REVEAL ABOUT ECHOLOCATION ABILITIES  
OF THE EOCENE BATS OF THE MESSEL PIT



Renate Rabenstein &  
Kristen T. Smith

THE MESSEL BATS OF THE SENCKENBERG COLLECTION AND  
ASPECTS OF THEIR TAPHONOMY

Lucia Šmídová

LATE CRETACEOUS COCKROACHES FROM THE REDMOND  
FORMATION (CENOMANIAN), LABRADOR, CANADA

Paloma-Maria Taraba,  
et al.

SNAKES (REPTILIA, SQUAMATA) FROM THE LOWER  
PLEISTOCENE OF IRHOUD-CARRIÈRE "OCRE" (MOROCCO):  
SYSTEMATICS AND TAPHONOMY, PALEOENVIRONMENTAL,  
PALEOCLIMATIC AND PALEOBIOGEOGRAPHIC IMPLICATIONS

Lucas Henrique Medeiros  
da Silva Trifilio, et al.

A PRELIMINARY STUDY OF BREAKAGE PATTERNS IN A NEO-  
TAPHONOMIC EXPERIMENT WITH RECENT BONES

Thomas Tütken,  
et al.

GAR SCALE GANOID ISOTOPES – PROXIES FOR WATER  
TEMPERATURE AND CHEMISTRY OF LAKE MESSEL

Marc Valois,  
et al.

LEAVES UNDER HEAT: PLANT ADAPTATION TO CO<sub>2</sub> AND  
CLIMATE CHANGE DURING MIDDLE EOCENE HYPERTHERMALS

Olaf Vogel & Anika Vogel

RESTORATION OF A SPECIMEN OF *TRIONYX MESSELIANA*  
REINACH, 1900 AFFECTED BY PYRITE-MARCASITE DECAY

Katrin Weber,  
et al.

DIET RECONSTRUCTION IN FOSSIL CROCODYLIANS USING  
STABLE CALCIUM ISOTOPES AND DMTA

Michael Zollweg,  
et al.

HISTORICAL FOSSIL EXCAVATIONS AND EMERGENCY SALVAGE  
OPERATIONS IN THE MESSEL PIT: A DOCUMENTARY REVIEW  
AND WHAT WE CAN LEARN FROM IT TODAY