



# 4.2 ka BP Event Workshop

**Pisa - January 10-12, 2018**

**Wednesday 10 on January**

*Earth Science Department Room C first floor*

## **10,15-10,30 Welcome and Introduction**

10,30-10,50 *Solicited talk: H. Weiss “ ‘The Mind Shudders...’, 4.2 ka BP, and Holocene Megadrought Discovery”*

## **Session: “Global and Spatial analyses” (Chairmen G. Zanchetta and H. Weiss)**

10,50 – 11,05 D. Kaufman, H. Kolus, N. McKay, C. Routson: *“Is 4.2ka the most prominent marker for subdividing the Holocene?”*

11,05 – 11,20 L. Ning, J. Liu, R. S. Bradley, M. Yan: *“Comparing the spatial patterns of 4.2ka and 8.2ka climate events”*

## **11,20-11,40 Coffee Break (Room E first floor or in the Garden)**

11,40-11,55 M. Yan, J. Liu, L. Ning: *“4.2ka BP climate event in a long-term climate modeling experiment using the CCSM3”*

11,55-12,10 N. Graham, M. Salzer, M. Hughes, D. Verschuren: *“Dust-Climate Interactions and the ‘4.2 ka event’”*

12,10-12,25 M. Sigl, M. Severi, J. R. McConnell: *“A role for volcanoes in causing the “4.2 ka BP event”?”*

## **12,30-14,30 Lunch break and poster session (Buffet offered by University of Pisa, Room E or in the Garden)**

## **Session: “High Latitudes” (Chairmen Y. Cai and R. Bradley )**

14,30-14,45 R. S. Bradley, J. Bakke *“4.2ka B.P. and the onset of the Neoglacial: the view from the North Atlantic and Scandinavia”*

14,45-15,00 Á. Geirsdóttir, T. Thordarson, G. H. Miller: *“Did the Hekla 4 eruption in Iceland have a role in the 4.2 ka event?”*

15,00-15,15 V. Gkinis: *“Holocene signals from the Greenland ice cores”*

15,15-15,30 D. A. Fisher: *“Holocene Elevation Change and Lagged Time Responses are Important Determinants for Some Variables and Sites and have to be characterized before correlations are attempted”*



15,30-15,45 N. Maffezzoli: *“Holocene sea ice record in the Greenland Sea from the Renland ice core”*

**15,45-16,15 Coffee Break (Room E first floor or in the Garden)**

**16.15 -17.30 General discussion (including short poster presentation 3 min each)**

## **Thursday 11 on January**

*Earth Science Department Room C first floor*

### **Session: “Mediterranean and West Asia” (chairmen M. Bini and G. Zanchetta)**

9,30-9,45 (*Solicited*) G. Zanchetta, M. Bini, E. Regattieri, I. Isola: *“The 4.2 event in the central Mediterranean”*

9,45-10,00 S. Affolter, A. Häuselmann, D. Fleitmann, M. Leuenberger: *“Contribution to the 4.2 kyr event of a speleothem record from Switzerland”*

10,00-10,15 A. Perşoiu: *“(Did) Cold air outbreaks over East-Central Europe blocked westerlies and deprived central Asia of moisture at 4.2 ka BP (?)”*

10,15-10,30 R. Cartier, E. Brisset, F. Guiter, F. Sylvestre, C. Paillès, E. J. Anthony, C. Miramont: *“The 4.2 ka event in the Mediterranean Alps: a reinforced Mediterranean-type climate regime that directly impacted the environment”*

10,30-10,45 A. Català, I. Cacho, J. Frigola, L. Pena, F. Lirer: *“The 4.2 expression in SST and humidity records from the western Mediterranean Sea”*

10,45-11,00 Lirer F., Bonomo S., Cascella A., Vallefucio M., Margaritelli G., Insinga D., Petrosino P.: *“Constrain and evidences for Event 4.2 in the central - western Mediterranean marine records: a contribution of NEXTDATA project”*

11,00-11,15 F. Di Rita, D. Magri: *“The 4.2 ka event in the vegetation record of the central Mediterranean”*

11,15-11,30 B. Jalali, M.-A. Sicre, J. Azuara, N. Combourieu-Nebout, M.-A. Bassetti, D. Genty: *“Disparities of the Mediterranean climate during the mid- to Late Holocene rapid climate changes (MISTRAL/PALEOMEX)”*

**11,30- 11,40 Coffee Break (Room E first floor or in the Garden)**

11,40-12,00 (*Solicited*) D. Kaniewski, N. Marriner, C. Morhange, E. Van Campo: *“The 4.2 ka BP event in the Southern Levant”*



12,00-12,15 Drysdale R.N., Zanchetta G., Greig A., Isola I., Regattieri E.: *“High-resolution trace element variability from an Italian flowstone through the 4.2 ka event”*

12,15-12,30 M. Finné, K. Holmgren, H.-M. Hu, C.-C. Shen, M. Boyd, C. Spötl: *“Speleothem evidence for dry climate condition around 4200 yrs BP from the Peloponnese”*

12,30-12,45 J.R. Dean, M. D. Jones, M. J. Leng, S. E. Metcalfe, W. J. Eastwood, J. Woodbridge, S. L. Allcock, C. N. Roberts: *“The 4.2 ka event in central Turkey, recorded in the sediments of Lake Nar”*

12,45-13,00 S. Carolin: *“Abrupt climate events around 4.2ka BP: evidence from an Iranian speleothem record”*

**13,00-14,30 Lunch break (Buffet offered by University of Pisa, Room E or in the Garden)**

### **Session: “Indus and Egypt” (Chairmen H. Weiss and Bradley)**

14,30-14,45 L. Marks, F. Welc: *“The 4.2 ka BP event in northeastern Africa based on record from the Faiyum Oasis in Egypt”*

14,45-15,00 F. Welc: *“4.2 ka climatic event in north-eastern Africa in the light of new geoarcheological data from Egypt”*

15,00-15,15 C. Zielhofer, H. von Suchodoletz, W.J. Fletcher, B. Schneider, E. Dietze, M. Schlegel, K. Schepanski, B. Weninger, S. Mischke, A. Mikdad: *“Millennial-scale fluctuations in Saharan dust supply across the decline of the African Humid Period”*

15,15-15,30 G. Kathayat, H. Cheng, A. Sinha, H. Y. Li, X. L. Li, D. Pengzhen, Y. F. Ning, R. L. Edwards: *“Indian Summer Monsoon events around 4.2 ka as recorded by high-resolution cave records from NE India: Timing, structure, and implications”*

15,30-15,45 A. Sinha, G. Kathayat, H. Cheng: *“The ‘4.2 ka BP Event’ in the Indian Subcontinent? An Objective Synthesis of Proxy Records”*

15,45-16,00 A. Giesche, M. S. Staubwasser, C. Petrie, D. Hodell: *“Re-examining the 4.2 ka BP event in foraminifer  $\delta^{18}O$  records from the Indus River delta in the Arabian Sea”*

**16,00- 16,30 Coffee Break (Room E first floor or in the Garden)**

**16,30-17,30 visit to Leaning Tower of Pisa and general photograph of the workshop participants**

**17,30-18,30 General discussion**



## Friday 12 on January

*Earth Science Department Room C first floor*

### Session: “China and East Asian Monsoon” (Chairmen Y. Cai and H. Weiss)

9,00-9,20 (*Solicited talk*) Y. Cai, L. Tan, Z. An: “The 4.2 ka BP Event in East Asia: A synthesis of varied proxy records”

9,20-9,35 J. Xiao, S. Zhang, J. Fan, R. Wen: “*The 4.2-ka event and its resulting cultural interruption in the Daihai Lake basin at the Asian summer monsoon margin*”

9,35-9,50 L. Tan, Y. Cai, C.-C. Shen, H. Cheng, R. L. Edwards, Z. An: “*4.2 ka event in the Loess Plateau of China*”

9,50 -10,05 Y. Liu, H. Song, Q. Li: “*The 3476-year tree-ring  $\delta^{18}O$  chronology on the Tibetan Plateau*”

10,05-10,20 L. A. Scuderi, X. Yang, S. E. Ascoli, Hongwei Li: “*Evidence of the 4.2ka Event in Northeastern China: A Geospatial Perspective*”

**10,20-10,45 Coffee Break (Room E first floor or in the Garden)**

### Session: “Western Hemisphere” (Chairmen R. Bradley and G. Zanchetta)

10,45-11,00 V. A. Carter, J.J. Shinker: “*Potential climatic mechanisms associated with the mega drought at 4200 cal yr BP in North America: linking proxy data with modern climate analogues*”

11,00-11,15 R. B. Aronson, L. T. Toth: “*The 4.2-ka event and reef development in the tropical Pacific*”

11,15-11,30 L. T. Toth, R.B. Aronson: “*Climatic and oceanographic drivers of coral-reef collapse in the eastern Pacific at 4.2 ka*”

11,30-11,45 M.-G. Bustamante: “*Holocene changes in monsoon precipitation in the northeastern Andean slopes of Peru*”

11,45-12,00 K. Schittek, L. C. Lupo, A. Maldonado, F. Schäbitz, B. Eitel: “*The 4.2 event in South America: multiproxy evidence for ecosystem changes as recorded in lake and peat records from the central Andes*”

### 12,00-13,30 Final discussion and proposal for special issue

**13,30-15,30 Lunch break (Buffet offered by University of Pisa, Room E or in the Garden)**

