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View of a ceiling in Altamira Cave, Cantabria, Spain (original image rotated 180°). The multicolor (brown and red) bison depicted here date to ~18,000 years ago but were painted on top of earlier single-color artwork (red). New uranium-thorium dates on calcite crusts show that the large (~50-centimeter) double-claviform figure (center right) is at least 35,600 years old, indicating that, at the latest, cave painting here began shortly after humans first arrived. See page 1409.

Photo: Pedro Saura
BREVIA

1408 Massive Phytoplankton Blooms Under Arctic Sea Ice
K. R. Arrigo et al.
In midsummer, diatoms have taken advantage of thinning ice cover to feed in nutrient-rich waters.

1432 A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems
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A marine plant, small mollusks, and their resident sulfide-oxidizing bacteria survive together.

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1409 U-Series Dating of Paleolithic Art in 11 Caves in Spain
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Dating of calcite crusts overlying art in Spanish caves shows that painting began more than 40,000 years ago.

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A distinct parameter, twisted spin, is predicted to be conserved in a two-dimensional semiconductor with spin-orbit interaction.

1416 Dipolar Antiferromagnetism and Quantum Criticality in LiErF4
C. Kraemer et al.
Scattering experiments reveal that magnetic ordering can arise from dipolar interactions, not only from exchange.

1420 Ambient-Temperature Isolation of a Compound with a Boron-Boron Triple Bond
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A boron analog of an alkyne has been synthesized by reduction of a brominated precursor.

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1426 Direct Detection of Projectile Relics from the End of the Lunar Basin–Forming Epoch
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Analysis of lunar rocks from the Apollo missions reveals fragments from meteorites that hit the Moon in the ancient past.

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