BREVIA

896 Tracking Long-Distance Songbird Migration by Using Geolocators
B. J. M. Stutchbury et al.
Miniature recorders mounted on purple martins and wood thrush allow mapping of migration routes between North America and the Neotropics.

REPORTS

897 Lunar Global Shape and Polar Topography Derived from Kaguya-LALT Laser Altimetry
H. Araki et al.
An analysis of lunar high-resolution topographic data helps explain how surface features are supported by the lithosphere.

900 Farside Gravity Field of the Moon from Four-Way Doppler Measurements of SELENE (Kaguya)
N. Namiki et al.
A gravity field model reveals differences in the lithosphere between the Moon’s far- and nearsides.

905 Long-Lived Volcanism on the Lunar Farside Revealed by SELENE Terrain Camera
J. Haruyama et al.
Images of the Moon by the SELENE spacecraft and revised dates of lava flows by crater counts imply that episodic volcanism on the farside lasted to 2.5 billion years ago.

909 Lunar Radar Sounder Observations of Subsurface Layers Under the Nearside Maria of the Moon
T. Ono et al.
A period of reduced volcanism may account for extensive regions of radar-reflective minerals that underlie some major lunar basalt flows.

912 Equilibrium Iron Isotope Fractionation at Core-Mantle Boundary Conditions
V. B. Polyakov
Calculated iron fractionation factors at high pressures may explain the different isotopic values found for Earth, Mars, and meteorites.

915 Skyrmion Lattice in a Chiral Magnet
S. Mühlbauer et al.
Magnetic ordering arises from a repeating network of spins caught in a spiral vortex structure.

919 Observation of Unconventional Quantum Spin Textures in Topological Insulators
D. Hsieh et al.
Spin imaging reveals an insulating state that results from the entanglement of a macroscopic number of spins.

923 Coherence Factors in a High-Tc Cuprate Probed by Quasi-Particle Scattering Off Vortices
T. Hanaguri et al.
The momentum-dependent coherence factors in a high-temperature superconductor are revealed by introducing magnetic vortices.

926 Polydnaviruses of Braconid Wasps Derive from an Ancestral Nudivirus
A. Bézier et al.
Virus-like particles used by parasitic wasps to manipulate host defenses are encoded by virus-related genes incorporated into the wasp genome.

930 Effects of Genetic Perturbation on Seasonal Life History Plasticity
A. M. Wilczek et al.
Interactions among mutation, germination timing, and climate alter flowering patterns in Arabidopsis.

934 The Hallucinogen N,N-Dimethyltryptamine (DMT) Is an Endogenous Sigma-1 Receptor Regulator
D. Fontanilla et al.
An endogenous compound is a ligand for a ubiquitously expressed receptor that binds many synthetic drugs and has been implicated in psychiatric disease.

937 When Your Gain Is My Pain and Your Pain Is My Gain: Neural Correlates of Envy and Schadenfreude
H. Takahashi et al.
Envy is strongest against those with similar attributes, and the most joy is gained from the pain of those envied the most.

940 A Neural Mechanism for Microsaccade Generation in Neurons
Z. M. Hafed et al.
The same neural structure involved in voluntary fast eye movements controls small involuntary movements that occur during gaze fixation.

943 An ABC Transporter Controls Export of a Drosophila Germ Cell Attractant
S. Ricardo and R. Lehmann
Similar lipid modification and export pathways produce the attractants important in migration of budding yeast and fruit fly germ cells.

946 The Orphan G Protein–Coupled Receptor 3 Modulates Amyloid-Beta Peptide Generation in Neurons
A. Thathiah et al.
A neuronal G protein–coupled receptor can stimulate the generation of the Aβ peptide implicated in Alzheimer’s disease.

951 Differences in Early Gesture Explain SES Disparities in Child Vocabulary Size at School Entry
M. L. Rowe and S. Goldin-Meadow
Pre-verbal communication through gestures can improve a child’s vocabulary.

CONTENTS continued >>
Signaling researchers met in Hamburg.