

Symposium and Talk Sessions

TALK ROOM 1

TALK ROOM 2

Friday, May 17

12:00 – 2:00 pm
2:30 – 4:30 pm
5:00 – 7:00 pm

Neurodiversity in visual functioning: Moving beyond case-control studies
The temporal evolution of visual perception
The Multifaceted effects of blindness and how sight might be restored

Large-scale visual neural datasets: where do we go from here?
Attention: accept, reject, or major revisions?
Using deep networks to re-imagine object-based attention and perception

Saturday, May 18

8:15 – 9:45 am
10:45 am – 12:30 pm
2:30 – 4:15 pm
5:15 – 6:45 pm

Perceptual Organization
Eye Movements: Neural mechanisms
Attention: Selection, modulation, resource competition
Perception of Relations, Intuitive Physics

Object Recognition: Models
Color, Light and Materials: Neural mechanisms, models
Face and Body Perception: Development, disorders, models, neural mechanisms
Visual Search 1

Sunday, May 19

8:15 – 9:45 am
10:45 am – 12:30 pm
2:30 – 4:15 pm
5:15 – 7:15 pm

Motion
Visual Memory: Working and behavior
Attention: Tracking, shifting, capture
Plasticity and Learning

Scene Perception: Behaviour, psychophysics
Spatial Vision
Color, Light and Materials: Materials, integrated perception
Eye Movements: Early visual processing

Monday, May 20

8:15 – 9:45 am
10:45 am – 12:15 pm

Eye Movements: Perception and timing
3D Perception

Object Recognition: Neural mechanisms
Development

Tuesday, May 21

8:15 – 9:45 am
10:45 am – 12:15 pm
2:30 – 4:15 pm
5:15 – 7:15 pm

Object Recognition: Categories and features
Face and Body Perception
Visual Memory: Working and neural mechanisms
Multisensory Processing

Attention: Neural mechanisms
Visual Search 2
Temporal Processing
Decision Making

Wednesday, May 22

8:15 – 10:00 am
11:00 am – 12:45 pm

Action
Scene Perception: Neural mechanisms, representations

Visual Memory
Binocular Vision

Exhibitors

ANT NEURO Booth 2
BRAIN VISION, LLC Booth 16
CAMBRIDGE RESEARCH SYSTEMS Booth 12
EXPONENT Booth 14
J.S. HELD Booth 5
NIRX MEDICAL TECHNOLOGIES Booth 9
PSYCHOLOGY SOFTWARE TOOLS Booth 10
PUPIL LABS Booth 11

ROGUE RESEARCH INC. Booths 3,4
SR RESEARCH LTD. Booth 15
VPIXX TECHNOLOGIES INC. Booths 6,7,8
WORLDVIZ VR Booth 1
ZETO, INC. Booth 13
Exhibit Hours
Saturday, Sunday, Tuesday, 8:00 am – 5:30 pm
Monday, 8:00 am – 12:30 pm

TradeWinds Resort Property Map



Registration Hours

Thursday, 4:00 – 7:00 pm
Friday, 7:00 am – 6:00 pm
Saturday, Sunday, 7:30 am – 6:45 pm
Monday, 7:45 am – 1:30 pm
Tuesday, 7:45 am – 6:45 pm
Wednesday, 7:45 am – 12:45 pm

Quiet & Social Lounge Hours

In Compass & Royal Tern
Friday, Saturday, Sunday, 7:30 am – 9:30 pm
Monday, 7:30 am – 12:30 pm
Tuesday, 7:30 am – 9:30 pm
Wednesday, 7:30 am – 12:30 pm

Welcome to VSS 2024



Sessions and Events

Friday, May 17

COMPUTATIONAL AND MATHEMATICAL MODELS IN VISION (MODVIS) VSS Satellite
9:00 – 12:00 pm, Blue Heron

THE VISION SCIENCE OF DIGITAL READABILITY: COMMUNITY-BUILDING WORKSHOP VSS Satellite
9:00 am – 12:00 pm, Snowy Egret

OPENING NIGHT RECEPTION
7:00 – 9:30 pm, Beach

VISIBILITY: A GATHERING OF LGBTQ+ VISION SCIENTISTS AND FRIENDS VSS Satellite
8:30 – 10:00 pm, Garden Courtyard

Saturday, May 18

UNVEILING THE POTENTIAL OF AI IN UNDERSTANDING HUMAN VISION WITH ETHICAL INTEGRATION
12:45 – 2:15 pm, Snowy Egret

VPIXX: A MULTISPECTRAL PROJECTOR FOR ADVANCED VISION SCIENCE VSS Satellite
12:45 – 2:15 pm, Banyan/Citrus

ENHANCING ACCESSIBILITY WORKSHOP
12:45 – 2:15 pm, Sabal/Sawgrass

KEYNOTE LECTURE – DORA BIRO
Eye in the sky: visually-guided navigation in birds
7:15 – 8:15 pm, Talk Room 1-2

Sunday, May 19

ART OF MEMORY EXHIBITION VSS Satellite
8:00 am – 6:00 pm, Glades

CANADIAN VISION SCIENCE SOCIAL VSS Satellite
12:30 – 2:30 pm, Sabal/Sawgrass

WORLDVIZ: VIRTUAL REALITY + EYE TRACKING FOR RESEARCH VSS Satellite
12:45 – 2:15 pm, Blue Heron

CAREER TRANSITIONS WORKSHOP
1:00 – 2:00 pm, Snowy Egret

US FUNDING WORKSHOP
1:00 – 2:00 pm, Banyan/Citrus

VISxVISION WORKSHOP: VISION SCIENCE AND DATA VISUALIZATION RESEARCH VSS Satellite
7:15 – 9:15 pm, Banyan/Citrus

Monday, May 20

ART OF MEMORY EXHIBITION VSS Satellite
8:00 am – 6:00 pm, Glades

AWARDS SESSION
Davida Teller Award, Ken Nakayama Medal, Young Investigator Award
12:30 – 2:00 pm, Talk Room 2

PSYCHOPHYSICS SOFTWARE WITH MATLAB VSS Satellite
2:00 – 3:30 pm, Jasmine/Palm

SO YOU PUBLISHED YOUR WORK – NOW WHAT? PATHS FOR VISION SCIENTISTS TO DRIVE SOCIETAL IMPACT VSS Satellite
2:00 – 5:00 pm, Blue Heron

HOW TO STOP WORRYING AND LOVE COMPUTATIONAL NEUROIMAGING OF THE VISUAL CORTEX VSS Satellite
2:00 – 5:00 pm, Banyan/Citrus

UNDERGRAD MEET & GREET
2:15 – 3:15 pm, Pirate Island

MEET THE PROFESSORS
3:30 – 5:00 pm, Banyan Breezeway

BEACH BBQ AND DEMO NIGHT
Dinner: 6:00 – 8:00 pm, Beach
Demos: 7:00 – 10:00 pm, Talk Room 1-2

Tuesday, May 21

ART OF MEMORY EXHIBITION VSS Satellite
8:00 am – 6:00 pm, Glades

ANNUAL BUSINESS MEETING
12:15 – 1:00 pm, Talk Room 2

PHIVIS: PHILOSOPHY OF VISION SCIENCE WORKSHOP VSS Satellite
12:30 – 2:30 pm, Banyan/Citrus

CONNECT WITH INDUSTRY
1:00 – 2:30 pm, Spotted Curlew, Snowy Egret, Blue Heron

NEGOTIATION: WHEN TO DO IT AND HOW TO DO IT SUCCESSFULLY
1:00 – 2:30 pm, Jasmine/Palm

CLUB VISION
10:00 pm – 2:00 am, Talk Room 1-2

Poster Sessions

BANYAN BREEZEWAY

Saturday, May 18, 8:30 am – 12:30 pm

Scene Perception: Miscellaneous
 Spatial Vision: Neural mechanisms
 Development: Clinical and high-level
 Plasticity and Learning: Models, neural mechanisms
 Face and Body Perception: Bodies
 Face and Body Perception: Neural mechanisms of social cognition
 Multisensory Processing: Neural coding
 Multisensory Processing: Development, clinical
 Motion: Higher-order

Saturday, May 18, 2:45 – 6:45 pm

Motion: Optic flow
 Temporal Processing: Neural mechanisms, models
 Eye Movements: Learning, expertise, context and faces
 Eye Movements: Saccades
 Visual Memory: Working memory and neural mechanisms
 Undergraduate Just-In-Time 1

Sunday, May 19, 8:30 am – 12:30 pm

Plasticity and Learning: Electrophysiology, brain stimulation
 Decision Making: Perceptual decision making 2
 Binocular Vision: Eye dominance and rivalry
 Color, Light and Materials: Neural mechanisms, models, disorders
 Development: Natural experience and eye movements
 Pre-Data-Collection Posters

Sunday, May 19, 2:45 – 6:45 pm

Object Recognition: Reading
 Object Recognition: Acquisition of categories
 Scene Perception: Virtual environments, intuitive physics
 Spatial Vision: Models
 Visual Search: Cueing, context, scene complexity, semantics
 Visual Search: Eye movements, suppression

Monday, May 20, 8:30 am - 12:30 pm

Motion: Illusions
 Visual Memory: Encoding, retrieval
 Visual Memory: Working memory and development, individual differences, capacity, resolution
 Visual Memory: Capacity, long-term memory
 Color, Light and Materials: Appearance, categories
 Undergraduate Just-In-Time 2

Tuesday, May 21, 8:30 am – 12:30 pm

Color, Light and Materials: Lightness, brightness
 Scene Perception: Ensembles, natural image statistics
 Visual Memory: Working memory and attention
 Visual Memory: Working memory and encoding, retrieval
 Visual Memory: Working memory and behavior, models
 Plasticity and Learning: Properties
 Binocular Vision: Clinical
 Action: Representation

Tuesday, May 21, 2:45 – 6:45 pm

Face and Body Perception: Emotion
 Face and Body Perception: Wholes, parts configurations, features
 Visual Search: Memory, search templates
 Visual Search: Mechanisms, models
 Perceptual Organization: Neural mechanisms, models
 Perceptual Organization: Parts, wholes, groups
 Pre-Data-Collection Posters

Wednesday, May 22, 8:30 am – 12:30 pm

Perceptual Organization: Segmentation, shapes, objects
 Spatial Vision: Image statistics, neural mechanisms
 Motion: Neural mechanisms
 Eye Movements: Perception, cognition and memory
 Eye Movements: Accuracy, pursuit and eccentricity

PAVILION

Visual Search: Attention, phenomena 1
 Attention: Capture
 Attention: Neural mechanisms
 Attention: Inattention, attentional blindness, suppression
 Decision Making: Decision making and actions
 Decision Making: Perceptual decision making 1

Multisensory Processing: Audiovisual behavior
 Multisensory Processing: Illusions, recognition
 Object Recognition: High-level features
 Object Recognition: Visual preference
 Color, Light and Materials: Surfaces, materials
 Color, Light and Materials: Art, cognition
 3D Perception: Depth cue integration, neural mechanisms
 Scene Perception: Neural mechanisms

Object Recognition: Neural mechanisms
 Attention: Features, objects 1
 Attention: Features, objects 2
 Attention: Spatial selection 1
 Attention: Spatial selection 2
 Eye Movements: Fixational eye movements

Face and Body Perception: Neural mechanisms 1
 Face and Body Perception: Neural mechanisms 2
 Face and Body Perception: Development, experience
 Visual Memory: Working memory and neural mechanisms, models, decision making
 Visual Memory: Imagery
 Visual Memory: Working memory and objects, features
 Action: Reach, grasp, track

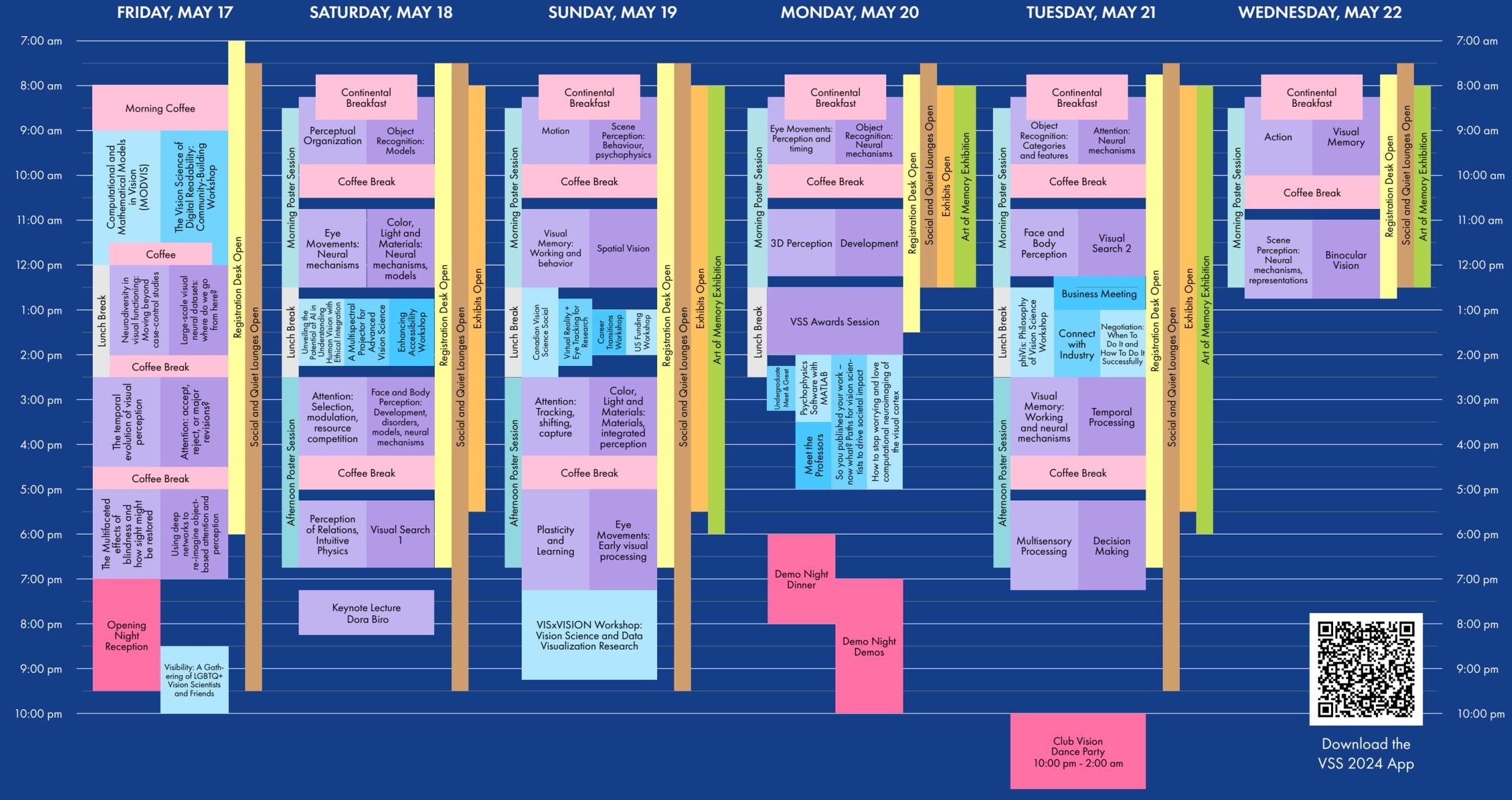
Data Visualization
 Visual Search: Neural mechanisms, clinical, applied
 Spatial Vision: Crowding, eccentricity
 Scene Perception: Categorization
 Attention: Tracking, shifting
 Attention: Temporal selection
 Attention: Divided, resource competition
 Plasticity and Learning: Disorders, atypical vision

Eye Movements: Natural world and VR
 Motion: Detection
 Visual Search: Attention, phenomena 2
 Decision Making: Perceptual decision making 3
 Temporal Processing: Duration, atypical, timing perception
 3D Perception: Size, shape, distance
 3D Perception: Virtual and augmented reality

Action: Locomotor, flow, steering
 Action: Clinical, neural
 Eye Movements: Clinical
 Object Recognition: Basic features
 Binocular Vision: Disparity, stereopsis and suppression
 Object Recognition: Structure of categories
 Spatial Vision: Machine learning, neural networks

Object Recognition: Models
 Face and Body Perception: Models
 Face and Body Perception: Disorders, individual differences
 Face and Body Perception: Social cognition
 Attention: Reward, motivation, emotion
 Attention: Exogenous, endogenous, gaze

Schedule-at-a-Glance



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