

INTERNATIONAL WORKSHOP ON **LABYRINTH AND PIANO KEY WEIRS**

The Labyrinth & PKW workshops series aims to bring together people with varied backgrounds (engineers, researchers, students...) to state and summarize the current knowledge on the Labyrinth and the Piano Key Weirs, two non-conventional hydraulic structures.

➤ **Technical Workshops and Tour**

➤ **Event: October 7-9, 2025**

➤ **Atlanta, Georgia**

Organized by



Lake Ogletree: Photo Copyright Solmax

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EVENT SCHEDULE OVERVIEW

INTERNATIONAL WORKSHOP ON LABYRINTH AND PIANO KEY WEIRS

Day 1 – Tuesday, October 7, 2025

Location: Georgia Tech Hotel and Conference Center

7:30 AM – 11:00 AM	Registration Open
8:00 AM – 9:00 AM	Breakfast
9:00 AM – 9:05 AM	Welcome
9:05 AM – 10:35 AM	Technical Sessions
10:25 AM – 10:55 AM	Morning Break (30 min)
10:55 AM – 12:15 PM	Technical Sessions
12:15 PM – 1:45 PM	Lunch Break
1:05 PM – 2:45 PM	Technical Sessions
3:05 PM – 3:35 PM	Afternoon Break
3:35 PM – 4:35 PM	Technical Sessions
4:55PM	Wrap-Up

Day 2 – Wednesday, October 8, 2025

Location: Georgia Tech Hotel and Conference Center

8:00 AM – 9:00 AM	Breakfast
9:00 AM – 10:20 AM	Technical Sessions
10:20 AM – 10:50AM	Morning Break
10:50 AM – 12:10 PM	Technical Sessions
12:10 PM – 1:40 PM	Lunch Break
1:40 PM – 3:00 PM	Technical Sessions
3:00 PM – 3:20 PM	Tour Summary
3:20 PM – 3:50 PM	Networking Afternoon Break

Day 3 – Thursday, October 9, 2025

Location: Tour of 3 locations, Georgia and Alabama

8:30 AM ET Depart Georgia Tech Atlanta, GA

6:35 PM ET Arrive Back at Georgia Tech Atlanta,

SESSION SCHEDULE

October 7, Day 1

9:00 AM – Welcome

Session A: R&D – Floating Objects and Sedimentation

9:05 AM – *Labyrinth and PKW spillways in the USA*

Paxson G. Crookston – USA/Belgium

9:25 AM – *Behavior of floating trees at coexisting Piano Key Weir and gated spillway*

Yang J. Helgesson – Sweden

9:45 AM – *Effect of driftwood on the hydraulic performance of A-type PKWs in-stream or at reservoirs*

Venetz P. Pfister – Switzerland

10:05 AM – *Impact of sedimentation on the discharge capacity of labyrinth weirs*

Belzner F. Gebhardt – Germany

Session B: R&D – Hydraulics

10:55 AM – *Remote sensing of the 3D water surface downstream of labyrinth weirs*

Langohr P. Bung – Germany

11:15 AM – *Interfacial velocity characteristics downstream of a PKW vs. linear weir*

Belay B.S. Oertel – Germany

11:35 AM – *Model-Prototype upscaling of discharge capacity of Piano Key Weir*

Yang J. Nilsen – Sweden

11:55 AM – *Physical model investigations on nappe instabilities at labyrinth weirs*

Gebhardt M. Belzner – Germany

Session C: R&D – Design and Application

1:45 PM – *Studies of non-rectilinear weirs – From labyrinth to PKW*

Ouamane A. Lempérière – Algeria

2:05 PM – *Enhancing the hydraulic efficiency of PKWs – Recent research*

Yang J. Li – Sweden

2:25 PM – *Innovative association of Fusegate® and PKW*

Lempérière F. Chapuis – France

2:45 PM – *Innovative use of PKWs or labyrinth weirs for long dams in plains*

Ho Ta Khanh M. – Vietnam

Session D: R&D – Numerical Modeling

3:35 PM – *Sensitivity analysis of PKWs using CFD and empirical methods*

Oukaili F. Bercovitz – France

3:55 PM – *Experimental and numerical investigation of A-type rectangular side PKW*

Hussain S. Ahmad – India

4:15 PM – *Key width ratio influence on PKW discharge via OpenFOAM simulations*

Lüddecke L. Oertel – Germany

4:35 PM – *Investigation on flow field near A-Type PKW*

Quamar S. Ahmad – India

4:55 PM – Wrap Up

SESSION SCHEDULE

October 8, Day 2

Day 2: Project Applications

Session E: Projects – Lessons Learned

9:00 AM – *Lessons from Prado Dam labyrinth spillway design*

Diaz Y., Philips M., Allen J.D., Crookston B. – USA

9:20 AM – *Research and application of PKWs in Vietnam (2025)*

Ho Ta Khanh M., Dau Xuan T. – Vietnam

9:40 AM – *Case study: Burton Pond Dam – “Honey, I Shrunk the PKW”*

Bisio D. – USA

10:00 AM – *PKWs with orifice sluice*

Dau Xuan T. – Vietnam

Session F: Projects – Design

10:50 AM – *Arced labyrinth spillway for Dog River Dam*

Kirksey B., Tuladhar R., Hudock G. – USA

11:10 AM – *Springton Spillway: Arced labyrinth weir research and application*

Thompson S., Tullis B., Crookston B., Marchisello M. – USA

11:30 AM – *La Laye Dam design approach*

Roy M., Derrien S., Schaguene J.D., Dautois G. – France

11:50 AM – *3D modeling for Lower Crow Dam rehabilitation*

Bartels J., Bernedo Sanchez C. – USA

Session G: Projects – Construction

1:40 PM – *PKWs around the world*

Epicum S., Jamali T., Crookston B. – Belgium

2:00 PM – *Nachtigal dam: 4917 m long labyrinth spillway*

Magnan D., Blancher B., Chapuis A., Guillemot T., Epicum – France

2:20 PM – *High-altitude labyrinth weir design & construction*

Miller N., Provencher M. – USA

2:40 PM – *Stainless steel PKW at Oule Dam spillway*

Fournié Y., Tralli H., Alende J.D., Epicum S. – France

3:00 PM – *Tour Summary*

3:20 PM – *Networking Afternoon Break*

TOUR SCHEDULE

INTERNATIONAL WORKSHOP ON LABYRINTH AND PIANO KEY WEIRS

Day 3 – Thursday, October 9, 2025

Off-site Tour Day (Eastern and Central Time Zones)

Time (Local) Event Location

8:30 AM ET	Depart Georgia Tech Atlanta, GA
9:15 AM ET	Lake Peachtree Dam – Tour Peachtree City, GA
10:15 AM CT	Ogletree Outing Club Lake – Tour Auburn, AL
11:45 AM CT	Lunch @ Resting Pulse Brewing Opelika, AL
1:45 PM CT	Bartlett's Ferry – Tour Salem, AL
6:35 PM ET	Arrive Back at Georgia Tech Atlanta, GA



Lake Peachtree Dam: Photo Copyright Just A Little Photography

REGISTRATION

INTERNATIONAL WORKSHOP ON LABYRINTH AND PIANO KEY WEIRS

	Full Workshop Registration	Workshop Technical Program NO TOUR
Continental Breakfast	X	
AM Technical Sessions	X	X
Lunch	X	X
Exhibits	X	X
PM Technical Sessions	X	X
WEDNESDAY activities		
Continental Breakfast	X	X
AM Technical Sessions	X	X
Lunch	X	X
Exhibits	X	X
PM Technical Sessions	X	X
THURSDAY activities		
Field Tour	X	

USSD Member Full Workshop Registration | \$650 |

Full Workshop Registration | \$750 |

Workshop Technical Program NO TOUR | \$595 |



More Information

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SPONSORSHIP

INTERNATIONAL WORKSHOP ON LABYRINTH AND PIANO KEY WEIRS

**Sponsoring the 4th International Workshop on
Labyrinth and Piano Key Weirs offers your
organization global exposure among industry
leaders, researchers, and attendees from around the
world.**

PKW Partner

\$3,000 (limit 2)

- Table at event
- One registration (\$700 value)
- Clickable logo on event website
- Logo in event marketing
- Logo in book
- Logo on signage on site
- Logo on welcome slides
- Logo item

PKW Contributor

\$2,000 (limit 4)

- Table at event
- One registration (\$700 value)
- Logo in event marketing
- Logo in book
- Logo on signage on site
- Logo on welcome slides

PKW Supporter

\$750 (limit 8)

- Logo in event marketing
- Logo in book
- Logo on signage on site
- Logo on welcome slides



More Information

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