



TSI SPRING FLUID WORKSHOP PIV/V3V WORKSHOP

April 22nd and 23rd, 2019

Monday, April 22 nd , 2019	
9:00 am to 9:10 am	Welcome and Introduction Location: Amazon/Nile
9:10 am to 10:15 am	<u>Particle Image Velocimetry</u> <ul style="list-style-type: none"> • Principles • Cross-Correlation • System Components – PIV and TR-PIV • Insight 4G Software • Key Parameters Location: Amazon/Nile
10:15 am to 10:30 am	Break
10:30 am to 12:00 pm	<u>LAB: 2D PIV Measurements</u> <ul style="list-style-type: none"> • System Setup and Operation • Spatial Resolution • Size of the Region Measured • Operation of INSIGHT 4G Software • Processing Methods Location: Yangtze Demo Room
12:00 pm to 1:00 pm	Lunch
1:00 pm to 2:00 pm	<u>Stereo PIV system</u> <ul style="list-style-type: none"> • Introduction • Principles and Theory • Operation and applications Location: Amazon/Nile
2:00 pm to 2:15 pm	Break
2:15 pm to 4:00 pm	<u>LAB: Stereo PIV system</u> <ul style="list-style-type: none"> • Setting up the Stereo PIV • Scheimpflug Arrangement • Mapping Function/Stereo Calibration • Measurement of 3D flow fields Location: Yangtze Demo Room
4:00 pm	Wrap-up for the day

Tuesday, April 23rd, 2019

9:00 am to 10:00 am	<u>V3V-Flex volumetric PIV system</u> <ul style="list-style-type: none">• Introduction• Principles and Theory• Operation and applications Location: Amazon/Nile
10:00 am to 10:45 am	<u>Insight V3V 4G Software: DPIR algorithm for reconstruction of dense particles</u> <ul style="list-style-type: none">• Analysis of volumetric PIV images Location: Amazon/Nile
10:45 am to 11:00 am	Break
11:00 am to 12:15 pm	<u>LAB: V3V-Flex volumetric PIV measurements</u> <ul style="list-style-type: none">• System alignment• System operation• Calibration Location: Yangtze Demo Room
12:15 pm to 1:15 pm	Lunch
1:15 pm to 4:00 pm	<u>LAB: V3V-Flex volumetric PIV measurements</u> <ul style="list-style-type: none">• Measurement of water channel flow Location: Yangtze Demo Room
4:00 pm to 4:30 pm	Summarize and Close