Day 1 – September 21: Introduction to the Summer School — Sound Perception in Rooms		
Morning	**Introduction to the Summer School**	
	10:00-10:20	Welcome
	10:20-11:00	The Two!Ears Project
	11:00-11:30	Organization of the Summer School
	11:30-12:00	Composition of Teams
— Lunch —		
Afternoon	**Invited Talk**	
	13:30-14:30	Fundamentals of Human Hearing and Psychoacoustics *by Prof. William Yost, Arizona State University, Tempe, AZ*
	14:30-14:45	*— Coffee Break —*
	Sound Perception in Rooms	
	14:45-15:45	Simulating Room Acoustics
	15:45-16:45	Practical Session with SoundScape Renderer
	Work on the Active Hearing Challenge	
	16:45-17:00	Introduction to the Challenge
	17:00-18:30	Initial work: Robots, Software and Environments
—Dinner—		

Day 2 – September 22: Peripheral Hearing and Auditory Modeling — Auditory Scene Analysis		
Morning	**Psychophysical Concepts and Basics of Peripheral Hearing**	
	09:00-10:00	Auditory Modeling
	10:00-10:45	The Two!Ears Auditory Front-End (AFE) Toolbox
	10:45-11:00	*— Coffee Break —*
	11:00-12:30	Practical Session with the Two!Ears AFE Toolbox
— Lunch —		
Afternoon	**Auditory Scene Analysis**	
	14:00-15:00	Introduction to Auditory Scene Analysis (ASA)
	Invited Talk	
	15:00-16:00	Why rapid adaptive processes are essential for listening in realistic auditory environments *by Prof. Shihab Shamma, Univ of Maryland, College Park, MD*
	16:00-16:15	*— Coffee Break —*
	Computational Auditory Scene Analysis	
	16:15-17:15	Computational Auditory Scene Analysis (CASA)
	Work on the Active Hearing Challenge	
	17:15-18:30	Monaural and Binaural Signal Processing with Robot Audio Device

Day 3 – September 23: Architectures for Machine hearing — Feedback and Attention		
Morning	**Architectures for CASA**	
	09:00-10:00	Blackboard Architecture for Localization and Tracking
	10:00-11:15	Practical Session on Localization and Tracking of a Moving Sound Source
	11:15-11:30	*— Coffee Break —*
	Feedback and Attention	
	11:30-12:30	Feedback and Attention
— Lunch —		
Afternoon	**Feedback and Attention (cont'd)**	
	14:00-14:30	What is attention and why is audition essential? The robot's point of view through a Dynamic Weighting model
	Work on the Active Hearing Challenge	
	14:30-16:00	Practical Session on CASA with MATLAB and Binaural Devices
— Guided Tour of Toulouse —		

Day 4 – September 24: Robot audition – Quality of Experience – System Integration for the Challenge		
Morning	**Robot Audition - Invited Talk**	
	09:00-10:00	Speaker detection, localization and tracking with a microphone array on a mobile robot *by Dr. Ivan Marković, Univ of Zagreb, Croatia*
	10:00-10:15	*— Coffee Break —*
	Robot Audition - Regular Session	
	10:15-11:00	The Two!Ears Architecture for Robot Audition
	11:00-12:30	Practical Session with the Two!Ears Architecture for Robot Audition
— Lunch —		
Afternoon	**Quality of Experience (QoE)**	
	14:00-14:45	Outlook Towards QoE and "Meaning"
	14:45-15:00	*— Coffee Break —*
	System Integration for the Active Hearing Challenge	
	15:00-18:30	Integration on the Robot Focus on "real time" system that incorporates the components developed during the week, e.g., from basic integration of MATLAB modules and poor responsiveness of the whole system, to higher integration into real time software architecture

Day 5 – September 25: System Integration for the Active Hearing System Challenge — Demonstration		
Morning	**System Integration for the Active Hearing Challenge (cont'd)**	
	09:00-12:30	Integration on the Robot Focus on "real time" system that incorporates the components developed during the week, e.g., from basic integration of MATLAB modules and poor responsiveness of the whole system, to higher integration into real time software architecture — *with Coffee Break* —
— Lunch —		
Afternoon	**The Active Hearing Challenge**	
	14:00-16:30	Play Off — Demonstration of Challenge Systems in Small-Scale Environment — Prizes
— Closing of the Summer School —		