## Socio-emotional virtual agent, Catherine Pelachaud

In this talk I will present our current work toward endowing virtual agents with communicative and emotional capabilities. I will start describing an interactive system of an agent dialoging with human users in an emotionally colored manner. The agent is an active listener and can display a large range of back-channels. Four agents have been defined with specific emotionally traits. They are defined by specific facial models but also behaviors. They can also mimic user's expressions such as smiles and head movements. Through their behaviors, the agents show various attitudes and levels of engagement. Lately we have concentrated our study on smile. Smiles can have many communicative functions, such as being a smile of politeness, happiness or embarrassment. These smiles differ in their morphology, being of shorter or longer duration, symmetric or not. Agents are perceived with different attitudes when they display these smiles.