

# **EMPATHIC**European H2020 project

Expressive, Advanced Virtual Coach to Improve Independent Healthy-Life-Years of the Elderly

### **Objectives**

Audio emotion annotation Emotion recognition

### Database description



134 recording of audiovisual dialogs 79 elder people participants Speech is extracted

### **Annotation protocol**

#### Labels

Category : calm sad happy puzzled tense Arousal : excited / slightly excited / neutral Valence : positive / slightly positive / slightly

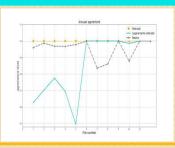
negative / negative

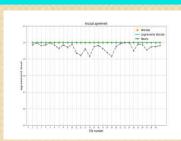
**Dominance :** rather dominant / neither dominant nor intimidated / rather intimidated

#### **Procedure**



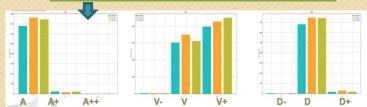
### Inter-annotator agreement





## Annotations' analysis

		calm	sad	hap	puzl.	tense	total
	1	7017	17	260	347	12	7:17:56
	2	7794	19	292	297	24	7:11:10
	3	7655	21	244	360	20	7:02:10



### Emotion recognition

**Acoustic parameters** 

**Arousal,, valence, dominance** ZCR, Energy Entropy of energy Spectral features:

Centroid | Spread | Entropy | Speed | rolloff

#### **Classification system**

