TECHNOLOGIES





Heart Rate Variability

CRE

Cardio-respiratory Events

DIGINEWB

Technologie maturée par



Measure of the maturational age of preterm babies monitored non-invasively and in real-time in the setting of NICU

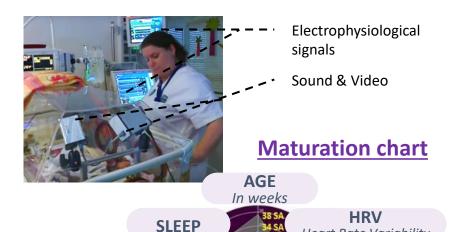
#MATURATIONAL AGE

#NICU

#PRETERM BABIES

Several markers - monitored in NICU - have been identified to determine the maturation level of preterm babies:

- **Cry analysis**: Automated detection and spontaneous cry extraction of long duration recordings for all types of cries, adapted to NICU with other noise like alarms or adults, Detection accuracy of 94.1% (412h of recordings on 23 newborns)
- Heart rate variability: 30 minutes of continuous heart rate or respiration rate monitoring to produce an estimation of the FMA - Functional Maturational Age, Real time and as a bed-side tool in NICU settings
- **Motion**: automatically monitoring of motions on long periods to provide relevant information about premature newborns motion activity
- **Sleep**: Semi-Automated sleep maturation estimation



MOVEMENTS

CRIES