

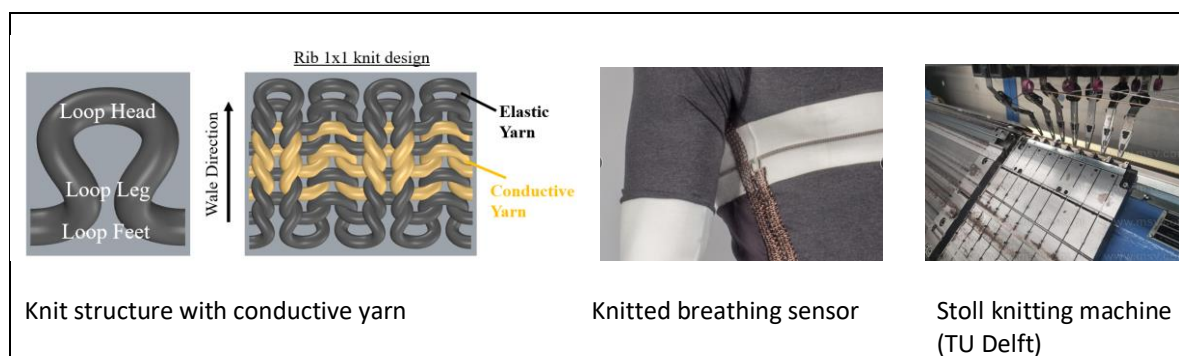
## DESIGN OF A KNITTED PRESSURE SENSOR

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### INTRODUCTION

Smart textiles are textiles with embedded sensors that can measure and monitor physiological signals like heart rate, breathing and temperature. In our research group we aim to develop a new generation of soft, fully textile-based sensors that are breathable, washable and stretchable by embedding conductive yarns in the textile structure. By changing the knit structure, the knitted patterns can be designed such that they respond to stretch or pressure.



### YOUR ASSIGNMENT

You will develop and test knitted structures to function as pressure sensors and create a prototype to demonstrate their potential in a specific use case.

### WORK AND LAB INFRASTRUCTURE

Your work will be part of the smart textile research line of the Emerging Materials. The experimental part will be done in the Applied Labs on the recently acquired programmable knitting machine and help and support about electronics, textiles and sensors is available.