

# TAKIGUCHI LAB.

## [The leading-edge trend of Quasi-electrostatic field]

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### Engineering of Quasi-electrostatic Field

Mechanical Engineering

## The leading-edge trend of Quasi-electrostatic field

For the human movement behavior and the activity more richly, it is hoped to develop the technology innovatively concerning the monitoring and the sensing of the man biological and sensibility information and the technology regarding to the provision of information and evaluation. In this laboratory, we study the application to the mobile society mainly, it pays attention to the field science expected from various viewpoints.

### The main topics of research

- ◆ Mobility communication and sensing, applying Quasi-electrostatic field
- ◆ Technology of Multipole electric-field control
- ◆ Development of “Smart Reference” use of Multipole Electrode Structure
- ◆ Quasi-electrostatic field sensing by using the technology of laser light assistance photoexcitation

**Human Walk Sensing**

**Motion Sensing**

**Car Body communication**

**Human Body communication**

**Domain of electric field zero**

generation principle of reference potential (ex. Quadrupolar structure)

X-Y plane

reference electrode, Transmitter [Camera], transmission electrode, Quasi-electrostatic field, Receiver [Monitor], receiving electrode, Signals

受信機, 送信機