

# AMR 2023/24: Final Project Group Assignments

(supervisor(s) name in parentheses)

**FP1. WMR control with UKF-based wheel slippage estimation (F. D'Orazio)**

*Francomano, Gallo, Tancredi*

**FP2. Grasping on-the-move using a mobile manipulator (F. D'Orazio)**

*Cirillo, Cirone, Schiavella*

**FP3. Obstacle avoidance: Control Barrier Functions vs Artificial Potential Fields (T. Belvedere)**

*Andreotti, Di Domenico, Scandiuzzi*

**FP4. Safe robot navigation in crowds using Nonlinear MPC (T. Belvedere, M. Cipriano, F. D'Orazio)**

*De Santis, Ferretti, Esposito Pelella*

**FP5. Vision-based human tracking and avoidance with TIAGo (T. Belvedere, M. Cipriano)**

*Carboni, Nardini, Santini*

**FP6. Quadruped motion generation in a world of stairs (M. Cipriano)**

*Fincato, Lucchese, Marchi*

**FP7. Kinodynamic motion planning for steerable WMRs (M. Cipriano)**

*Basile, Ciarpaglini, Del Signore*

**FP8. Vehicle control via MPC with cascaded models (N. Scianca)**

*Ferrari, Maiorana, Volpi*

**FP9. Vehicle control via Learning MPC with error dynamics regression (N. Scianca)**

*Giarrusso, Murra, Romano*