```
nav core::BaseLocalPlanner
backward local planner
    ::BackwardLocalPlanner

    paramServer

    backwardsPlanPath

    costmapRos

    goalMarkerPublisher

- k rho
- k alpha

    k betta

    goalReached

- initialPureSpinningStage

    pureSpinningMode

- alpha offset

    betta offset

- yaw goal tolerance
- xy goal tolerance
- carrot distance

    carrot angular distance

- max linear x speed
- max angular z speed

    currentPoseIndex

+ BackwardLocalPlanner()
+ ~BackwardLocalPlanner()
+ computeVelocityCommands()
+ isGoalReached()
+ setPlan()
+ initialize()
+ initialize()
+ initialize()
reconfigCB()
createCarrotGoal()
pureSpinningCmd()

    defaultBackwardCmd()

publishGoalMarker()
```