

## BDSBunchInterface

```
# X0
# Y0
# Z0
# T0
# Xp0
# Yp0
# Zp0
# sigmaT
# sigmaE
```

```
+ BDSBunchInterface()
+ BDSBunchInterface()
+ BDSBunchInterface()
+ ~BDSBunchInterface()
+ SetOptions()
+ GetNextParticle()
+ GetX0()
+ GetY0()
+ GetZ0()
+ GetT0()
+ GetXp0()
+ GetYp0()
+ GetZp0()
+ GetSigmaE()
+ GetSigmaT()
# CreateMultiGauss()
# CalculateZp()
```

std::ifstream

## BDSBunchUserFile

```
# distribFile
# bunchFormat
# nlinesIgnore
- InputBunchFile
- fields
```

```
+ BDSBunchUserFile()
+ ~BDSBunchUserFile()
+ SetOptions()
+ GetNextParticle()
- ParseFileFormat()
- OpenBunchFile()
- CloseBunchFile()
- skip()
- ReadValue()
- SetDistribFile()
- SetBunchFormat()
- SetNLinesIgnore()
- ParseEnergyUnit()
- ParseLengthUnit()
- ParseAngleUnit()
- ParseTimeUnit()
```

InputBunchFile