

```
1 // Implementation of ParticleType.hpp - Luca Morelli 2021
2
3 #include "ParticleType.hpp"
4
5 #include <iostream>
6 #include <string>
7
8 // Member function definitions
9 void ParticleType::print() const {
10     std::cout << '|' << name_ << "|Mass:" << mass_ << "Kg|Charge:" << charge_
11         << "C|";
12 }
13
14 std::string const& ParticleType::getName() const { return name_; }
15
16 double ParticleType::getMass() const { return mass_; }
17
18 int ParticleType::getCharge() const { return charge_; }
19
20 double ParticleType::getWidth() const { return 0; }
21
22 // Operator overload definition
23 std::ostream& operator<<(std::ostream& os, ParticleType const& particleType) {
24     particleType.print();
25     return os;
26 }
```