

```

1 // Header file ResonanceType.hpp - Luca Morelli 2021
2
3 #ifndef RESONANCETYPE_HPP
4 #define RESONANCETYPE_HPP
5
6 #include "ParticleType.hpp"
7
8 #include <string>
9
10 // ResonanceType class inherits from ParticleType
11 class ResonanceType : public ParticleType {
12     // Data member
13     double const width_;
14
15 public:
16     // Constructor
17     ResonanceType(std::string name, double mass, int charge, double width)
18         : ParticleType(name, mass, charge), width_{width} {}
19     // Member functions
20     void print() const;
21     double getWidth() const;
22 };
23
24 // Operator overload
25 std::ostream& operator<<(std::ostream& os, ResonanceType const& resonanceType);
26
27 #endif

```