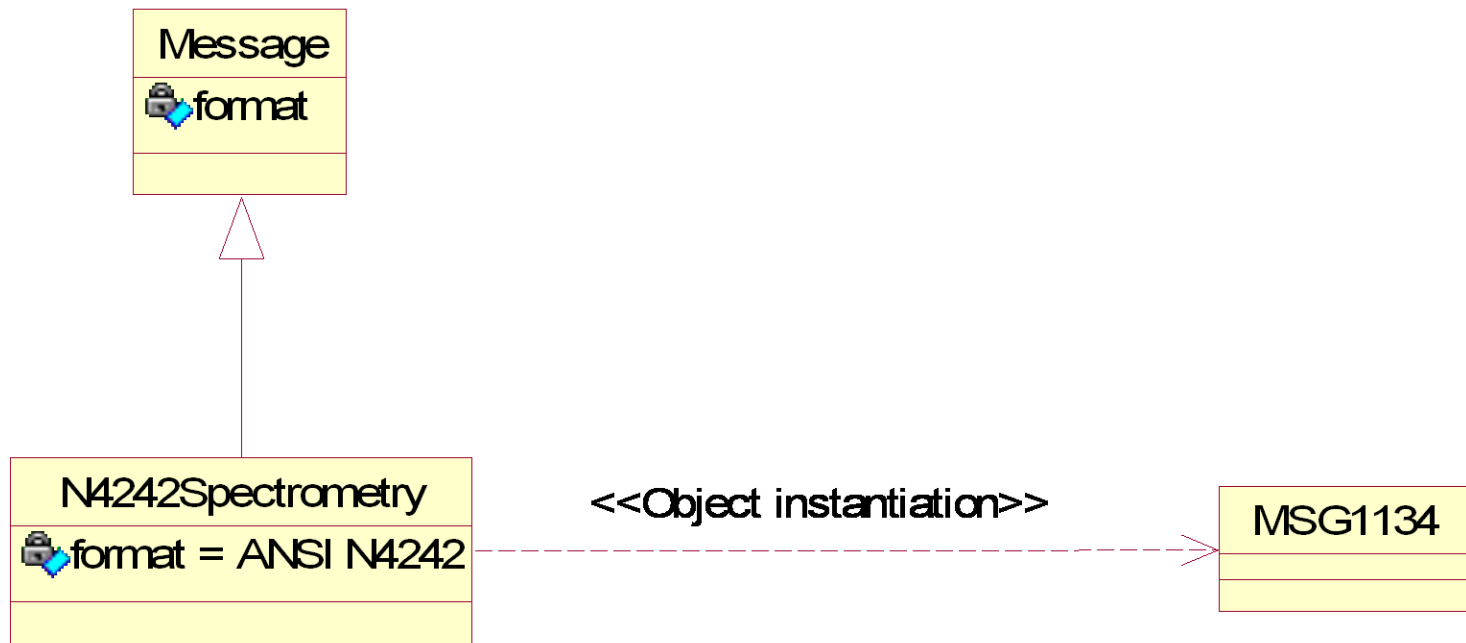


***Ontology Proofs
by Hand and with Pellet***

CS690 – Week 7 Slides

Jordan Osecki

MSG1134 is an object of type Message (Hand)



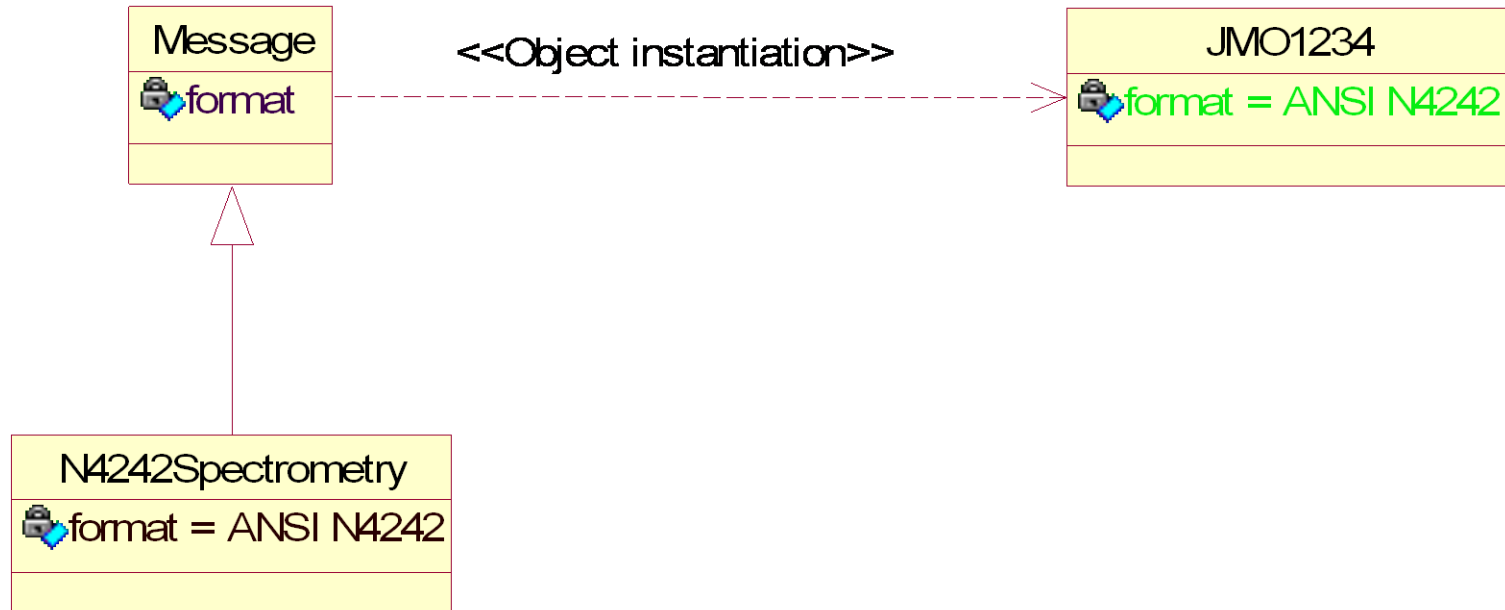
MSG1134 is an object of type Message (Pellet)

- Command Line Entry:
 - pellet explain –instance
 - <http://ontonet.org/full-example.rdf#MSG1134>,
<http://ontonet.org/message.owl#Message>
 - full-example.rdf
- Answer:
 - Axiom: MSG1134 type Message
 - Explanation:
 - MSG1134 type N4242Spectrometry
 - N4242Spectrometry equivalentTo Message **and** format value

Description for object of type Message with format ANSI N4242

```
<msg:Message rdf:about="&ex;#JMO1234">  
  
  <msg:source>  
    <cbr2:Fixed-FT-IR rdf:about="#Sensor03NG">  
      <msg:org rdf:resource="&orgs;#NEAir-Haz" />  
    </cbr2:Fixed-FT-IR>  
  </msg:source>  
  
  <cbr:nuclideDetected>  
    <cbr2:Am-241>  
      <cbr:confidence>93.0</cbr:confidence>  
      <cbr2:concentration>0.002</cbr2:concentration>  
    </cbr2:Am-241>  
  </cbr:nuclideDetected>  
  
  <msg:format rdf:resource="&nist-ansi-n4242xsd;#" />  
  
</msg:Message>
```

JMO1234 is an object of type
N4242Spectrometry (Hand)



JMO1234 is an object of type N4242Spectrometry (Pellet)

- Command Line Entry:
 - pellet explain –instance
 - <http://ontonet.org/full-example.rdf#JMO1234>,
 - <http://ontonet.org/cbr2.owl#N4242Spectrometry>
 - full-example.rdf
- Answer:
 - Axiom: JMO1234 type N4242Spectrometry
 - Explanation:
 - N4242Spectrometry equivalentTo Message **and** format value
 - JMO1234 format
 - JMO1234 type Message