NetworkX Directed Graph Visualisation

Physics concepts for instance:

Overview:

This Python script uses NetworkX, a powerful library for network analysis, to create a directed graph that visually represents the relationship between several key concepts in physics, particularly focusing on the "Dual Nature of Radiation and Matter" and the "Photoelectric Effect."

Features:

1) Directed Graph Creation:

Nodes represent significant concepts and historical milestones in physics, such as the "Photoelectric Effect" and "Albert Einstein in 1905."

2) Edge Labelling:

Each edge in the graph is labelled to denote the relationship between the concepts, like 'discovered by' or 'deals with.'

3) Customizable Layout:

The script uses a spring layout for positioning nodes, but this can be customised.

4) Visual Attributes:

The graph features attributes such as node colour, size, and edge colour for enhanced readability.

Where can we use, but not limited to:

This script is ideal for educational purposes, especially for those studying physics or interested in representing any concepts where entities are related to each other via some relation. It can be used as a starting point for more complex network visualisations.

How to run this in your local machine:

1) Ensure you have Python installed.
2) Install NetworkX using pip: `pip install networkx`
3) Run the script to generate the graph.
4) The graph will display in a new window, illustrating the relationships between the concepts.

What can be done further:

Contribution:

Feel free to fork this project, make your changes, and submit a pull request if you have ideas on how to improve or extend this visualisation!