**Online Materials are provided for the help of understanding more clear idea of physics**

* **Chapter-18**
* ***Superposition and Standing waves***
* Lectures:

Bell Laboratory teaching & others

<https://www.youtube.com/watch?v=DovunOxlY1k>

<https://www.youtube.com/watch?v=vKnIxWFnMZk>

Standing wave

<https://www.youtube.com/watch?v=jSLw01C9Pv8>

* Short Videos:

Harvard University projection of waves

<https://www.youtube.com/watch?v=QrGJo5tU92k>

Interference

<https://www.youtube.com/watch?v=CAe3lkYNKt8>

<https://www.youtube.com/watch?v=OwVt4tkj5HI>

Standing wave

<https://www.youtube.com/watch?v=BhQUW9s-R8M>

<https://www.youtube.com/watch?v=1S4DtuMY88I>

Resonance

<https://www.youtube.com/watch?v=p3OXt1Y1rMc>

<https://www.youtube.com/watch?v=SYAR-NIBS3c>

Tacoma Bridge collapse for resonance

<https://www.youtube.com/watch?v=3mclp9QmCGs>

* How superposition is important for quantum computer: It’s a documentary if anybody is interested

<https://www.youtube.com/watch?v=0dXNmbiGPS4>

(2) Bridge Construction

<https://www.youtube.com/watch?v=N9fbRcRJY34>

* **Chapter-19**
* ***Temperature***
* Lectures:

Conceptual Physics, Paul Hewitt, UC Berkeley & San Francisco

<https://www.youtube.com/watch?v=TtwptuHxdhU>

MIT: Walter Lewin

<https://www.youtube.com/watch?v=iIQGr4asjko>

* Short videos:

Heat, temperature & energy

<https://www.youtube.com/watch?v=maPt__CZ1cY>

<https://www.youtube.com/watch?v=yxBTEMnrZZk>

<https://www.youtube.com/watch?v=S2zLnGPwYoY>

Thermal Expansion

<https://www.youtube.com/watch?v=LmN8bybyQY8>

<https://www.youtube.com/watch?v=2T4TV4xOZWg>

Future transport documentary: Related to thermal properties (If anyone is interested)

<https://www.youtube.com/watch?v=oYOmZlTjsQ0>