

# VIDEO PEMBELAJARAN

## MATERI: Maxwell-Boltzmann Distribution

### PART 1

Dapat diakses di: [http://youtu.be/\\_1plrA0h7Lg](http://youtu.be/_1plrA0h7Lg) atau <http://jeikhsan.wordpress.com/kuliah/>

The screenshot shows a YouTube video player interface. The video title is "Jaslin Ikhsan: Maxwell-Boltzmann Distribution Part 1". The video content features a presenter and a slide with the following mathematical equations:

$$\int_{-\infty}^{\infty} A \cdot e^{-\frac{1}{2} m v_x^2 / k T} \cdot dv_x = 1$$

Mathematics Solutions:

$$\int_{-\infty}^{\infty} v^x \cdot e^{-a v^2} \cdot dv = 0$$
$$\int_{-\infty}^{\infty} e^{-a v^2} \cdot dv = \sqrt{\frac{\pi}{a}}$$
$$\int_{-\infty}^{\infty} v \cdot e^{-a v^2} \cdot dv = 0$$
$$\int_{-\infty}^{\infty} v^2 \cdot e^{-a v^2} \cdot dv = \frac{1}{2} \sqrt{\frac{\pi}{a^3}}$$
$$\int_{-\infty}^{\infty} v^3 \cdot e^{-a v^2} \cdot dv = 0$$

The video player shows a progress bar at 03:38 / 15:00 and 540 views. The video was uploaded by jaslinkhsan on May 25, 2011. The description reads: "To study the Kinetic Theory of Gas. Determine the equation of Maxwell-".

Below the video player, there are sections for "All Comments (0)", "Reactions (0)", and a "Sign In or Sign Up now to post a comment" button. A "Your reaction?" dropdown menu is also visible.

On the right side of the video player, there is a list of recommended videos:

- YouTube Mix for Maxwell by YouTube (PLAYLIST) 59 videos
- Maxwell distribution Greek by MrJahnchos (188 views)
- The Boltzmann Distribution by revarianby (4,033 views)
- Jaslin Ikhsan: Maxwell-Boltzmann Distribution P... by jaslinkhsan (188 views)
- boltzmann distribution by photon2010 (124 views)
- Lecture 3 | Modern Physics: Statistical Mechanics by StanfordUniversity (22,987 views)
- 6.2.5 Sketch and Explain Qualitatively the Maxw... by richmorley (1,887 views)

The bottom of the screenshot shows the Windows taskbar with the system tray displaying the time as 6:06 and the date as IN 75%.

Jaslin Ikhshan: Maxwell-Boltzmann Distribution Part 1 - YouTube - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.youtube.com/watch?v=\_1plrA0h7Lg

Most Visited Getting Started Latest Headlines SEAMEO SEAMOLEC, ... Chemical Kinetics

Jaslin Ikhshan - YouTube

**YouTube** jaslin ikhshan Search Browse Upload Create Account Sign In

### Jaslin Ikhshan: Maxwell-Boltzmann Distribution Part 1

JaslinIkhshan 9 videos Subscribe

$$\frac{dN}{N} = A e^{-\frac{1}{2} m v_x^2 / kT} dv_x = 1$$
$$v_x = -\infty \text{ to } +\infty$$
$$A = \frac{1}{\int_{-\infty}^{+\infty} e^{-\frac{1}{2} m v_x^2 / kT} dv_x}$$

5:18 06:27 / 15:00 360p 540 views

Like Add to Share

Link to this video: [http://youtu.be/\\_1plrA0h7Lg](http://youtu.be/_1plrA0h7Lg) show options

Embed Email show more Watch with your friends. Start a Google+ Hangout

- YouTube Mix for Maxwell by YouTube PLAYLIST 59 videos
- Maxwell distribution Greek by MirZahediches 188 views
- The Boltzmann Distribution by revisionboy 4,033 views
- Jaslin Ikhshan: Maxwell-Boltzmann Distribution P... by jaslinikhshan 188 views
- boltzmann distribution by photo2010 124 views
- Lecture 3 | Modern Physics: Statistical Mechanics by StanfordUniversity 22,987 views
- 6.2.5 Sketch and Explain Qualitatively the Maxw... by richthornley 1,067 views

Understanding the

Transferring data from o-o-preferred.pttelkom-bth1.v1.lscache2.c.youtube.com...

Jaslin Ikhshan: Maxw... Document1 - Micro... 73% 6:08