





Video Roles

+ Video Role

Titles

Titles

Video

Video

PICTURES

PICTURES

New Subrole

pictures subrole

- PICTURES NOT TO GO

+ Subrole



HIDE

PICTURES NOT TO GO subrole

pictures not to go subrole2



Audio Roles

+ Audio Role

Dialogue

Effects

Music

Cancel

Apply

Camera Name

Media Start

00:00:00

00:03:00:00

Extended

App

How a har

New Compound Clip...

⌘G

Open Clip

⌘P

Change Duration...

⌘D

Rename Clip

Disable

V

Assign Audio Roles

▶

Assign Video Roles

▶

Expand Audio

⌘S

Expand Audio Components

⌘⌘S

Show Video Animation

⌘V

Show Audio Animation

⌘A

Lift from Storyline

⌘⌘↑

Reveal in Browser

⌘F

00:03:15:00

00:03:20:00

Picture THREE

Picture THREE

Picture THREE

Picture THREE

Globeasatoy



Titles

⌘⌘T

Video

⌘⌘V

PICTURES

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New Subrole

✓ pictures subrole

PICTURES NOT TO GO

PICTURES NOT TO GO subrole

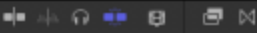
pictures not to go subrole2

Edit Roles...

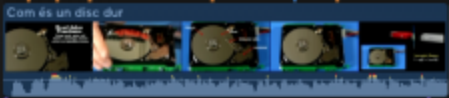
Index



How a hard drive works 05:03:20



00:00:00-00 | 00:00:30-00 | 00:01:00-00 | 00:01:30-00 | 00:02:00-00 | 00:02:30-00 | 00:03:00-00 | 00:03:30-00 | 00:04:00-00 | 00:04:30-00 | 00:05:00-00



Atmosfera

Clouds





▶ 00:01:52:20



Experiment 08:10 / 05:03:20 >

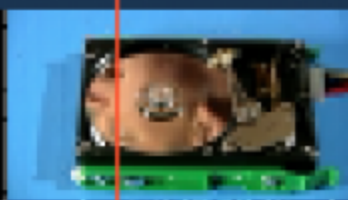
00:01:50:00

00:0

Ferromagnetic core



sc dur





Video Roles



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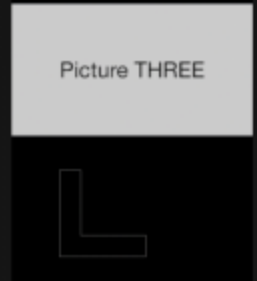
How...works

- Smart...tions
- All Video
- Audio Only
- Favorites
- Projects
- Stills

5-09-2019

Picture THREE

- Name
- Picture TH
 - Picture TV
 - Com és ur
 - Screen Shi
 - Screen Shi
- 1 of 24 selected, 10:00



Picture THREE 00:00 10:00

1980 x 1080 | 25p
Last Modified 5 September 2019 at 17:55

Notes	
Name	Picture THREE
Start	01:00:00:00
End	01:00:10:00
Duration	00:00:10:00
Reel	
Scene	
Take	
Camera Angle	
Camera Name	
Media Start	00:00:00:00

00:03:00:00

Extended Apply Custom Name

Index How a hard drive works Storyline 10:00 / 05:03:20

00:02:45:00 00:02:50:00 00:02:55:00 00:03:00:00 00:03:05:00 00:03:10:00 00:03:15:00 00:03:20:00 00:03

Slider

Picture THREE

Com és un disc dur

Globosatoy

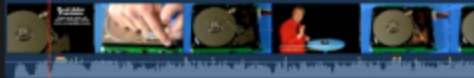




00:00:00:00 | 00:00:30:00 | 00:01:00:00 | 00:01:30:00 | 00:02:00:00 | 00:02:30:00 | 00:03:00:00 | 00:03:30:00 | 00:04:00:00 | 00:04:30:00



Com és un disc dur



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Atmosphere

Clouds





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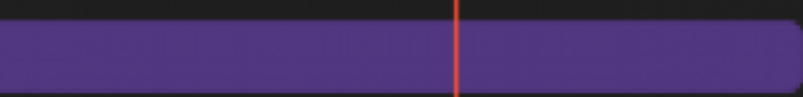
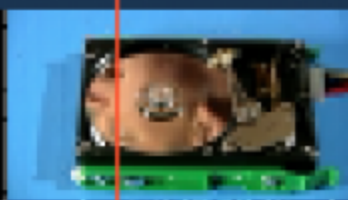
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Ferromagnetic core



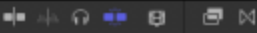
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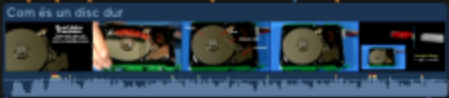
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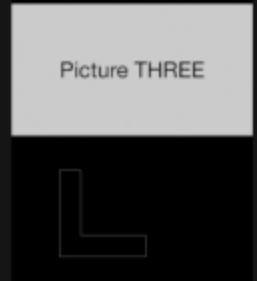
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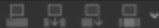
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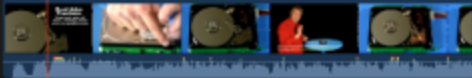
Globosatoy



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Com és un disc dur



Com és un disc dur



Atmosphere

Clouds



Hard drive Teardown

flying heads, voice coil
motors, amazingly smooth
surfaces & signal processing

series 3 | [engineerguy videos](#)

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THE CAMILLE
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FOUNDATION, INC.



Bill Hammack

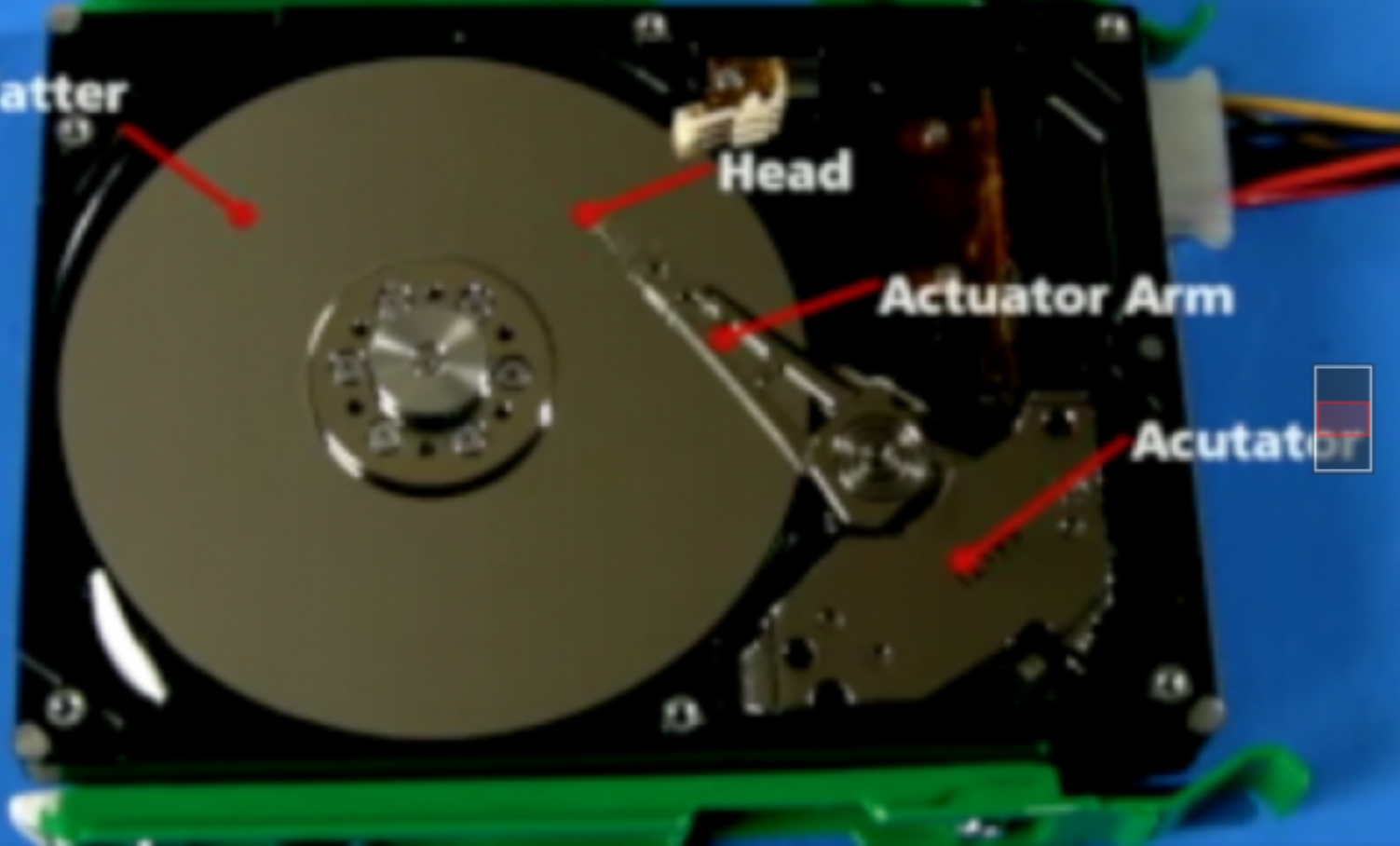
Department of Chemical
& Biomolecular Engineering
University of Illinois - Urbana

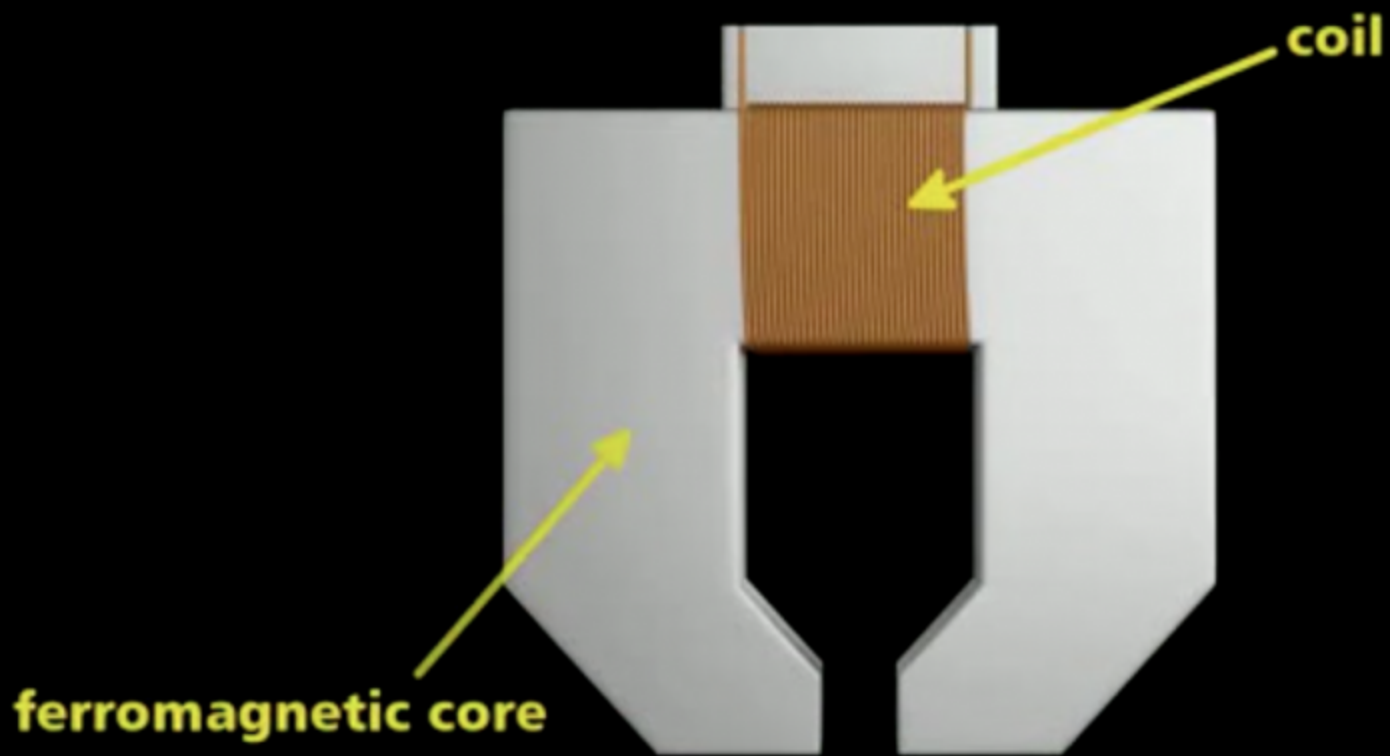
Platter

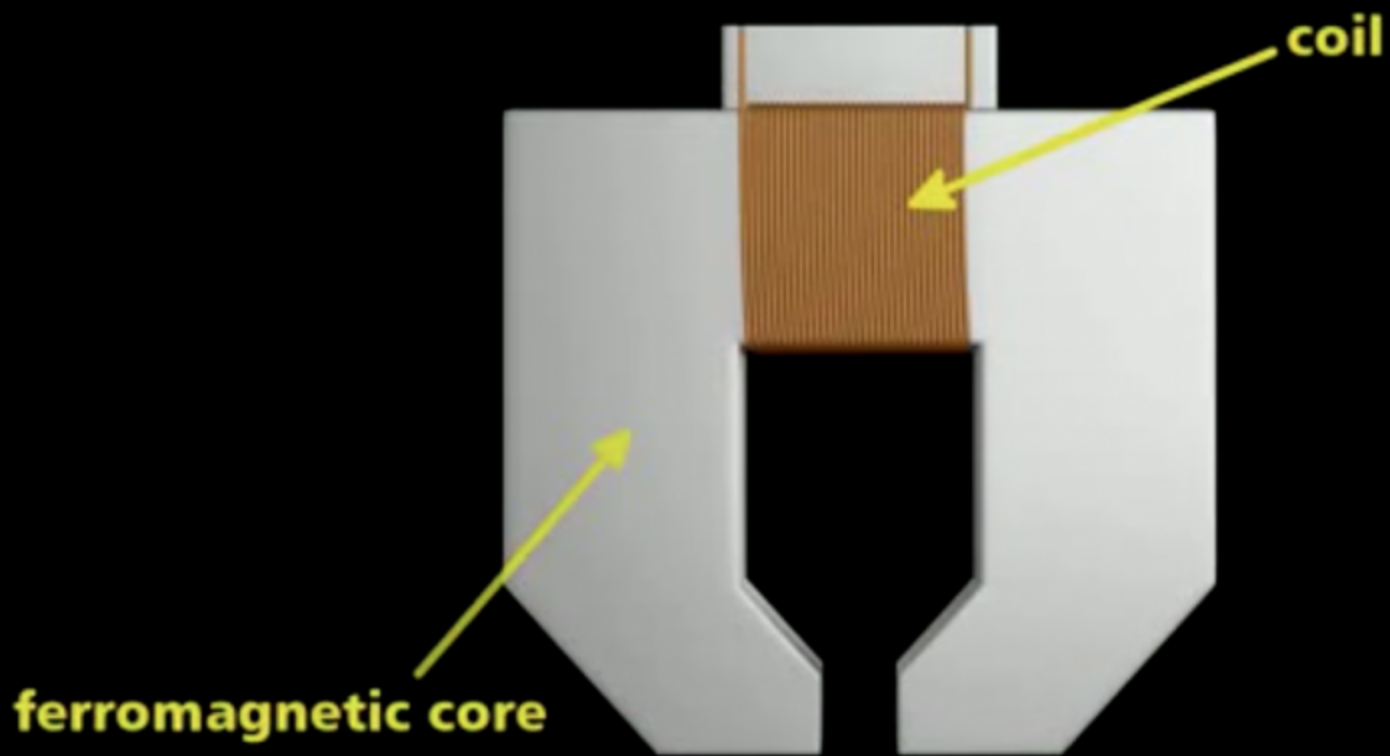
Head

Actuator Arm

Actuator









Faraday's Law The EMF (electromotive force) generated is proportional to the rate of change of the magnetic flux



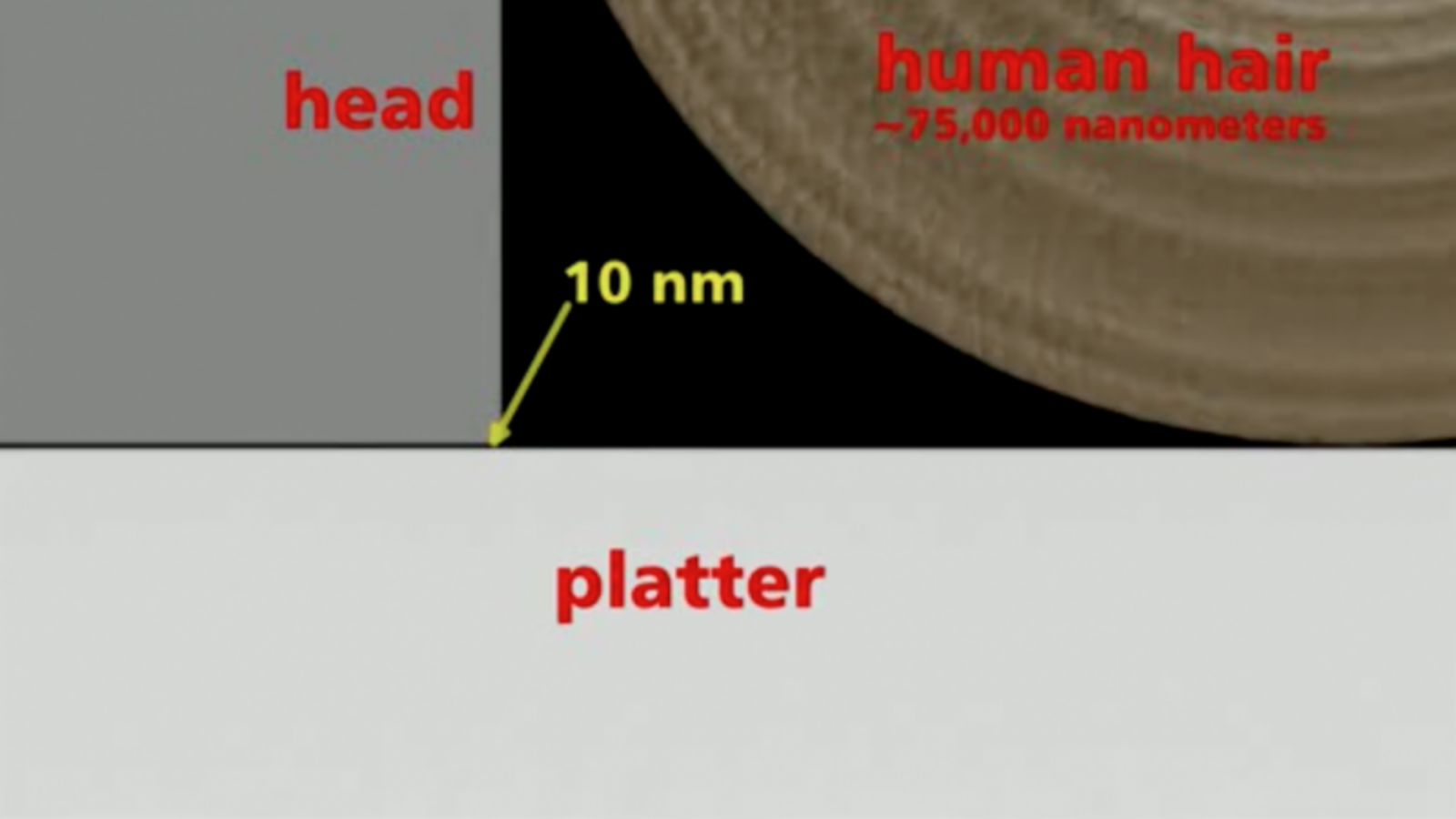
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head

human hair
~75,000 nanometers

10 nm

platter

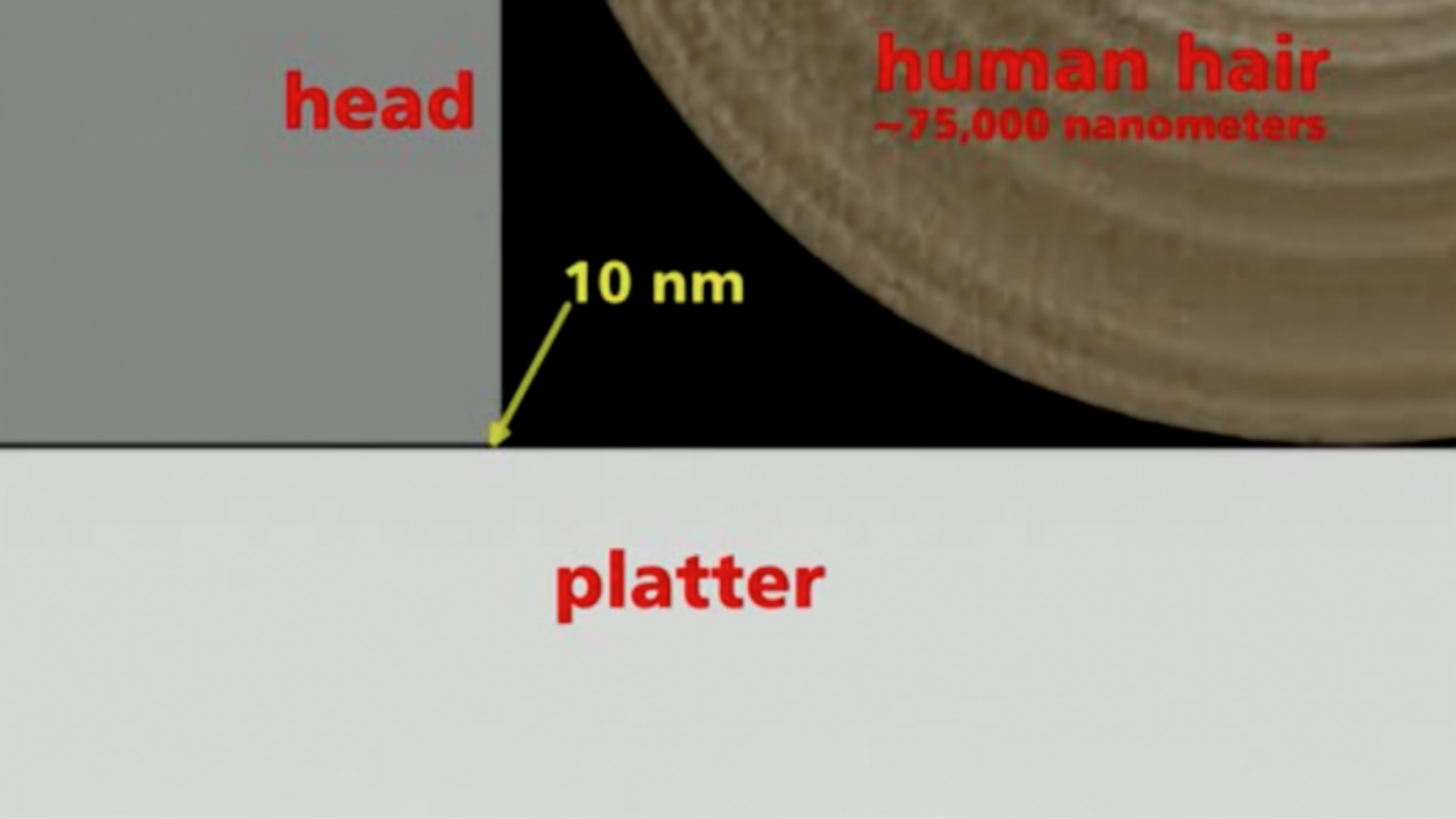


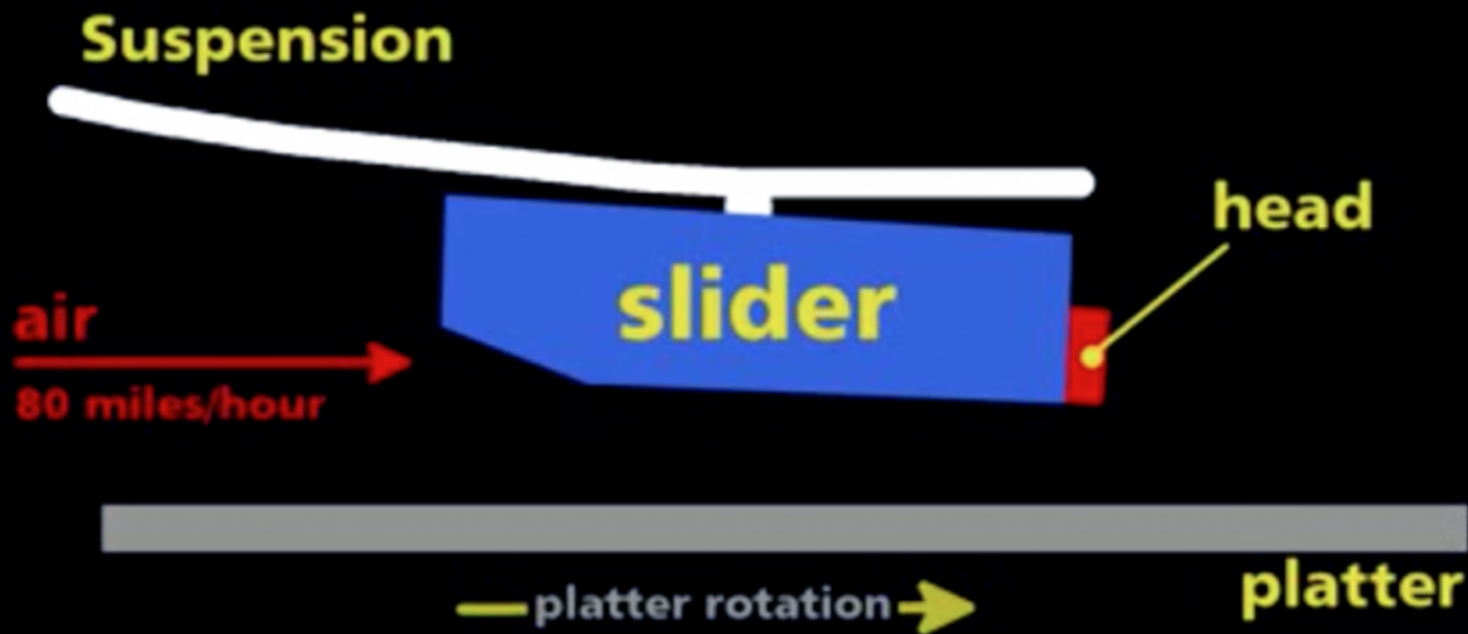
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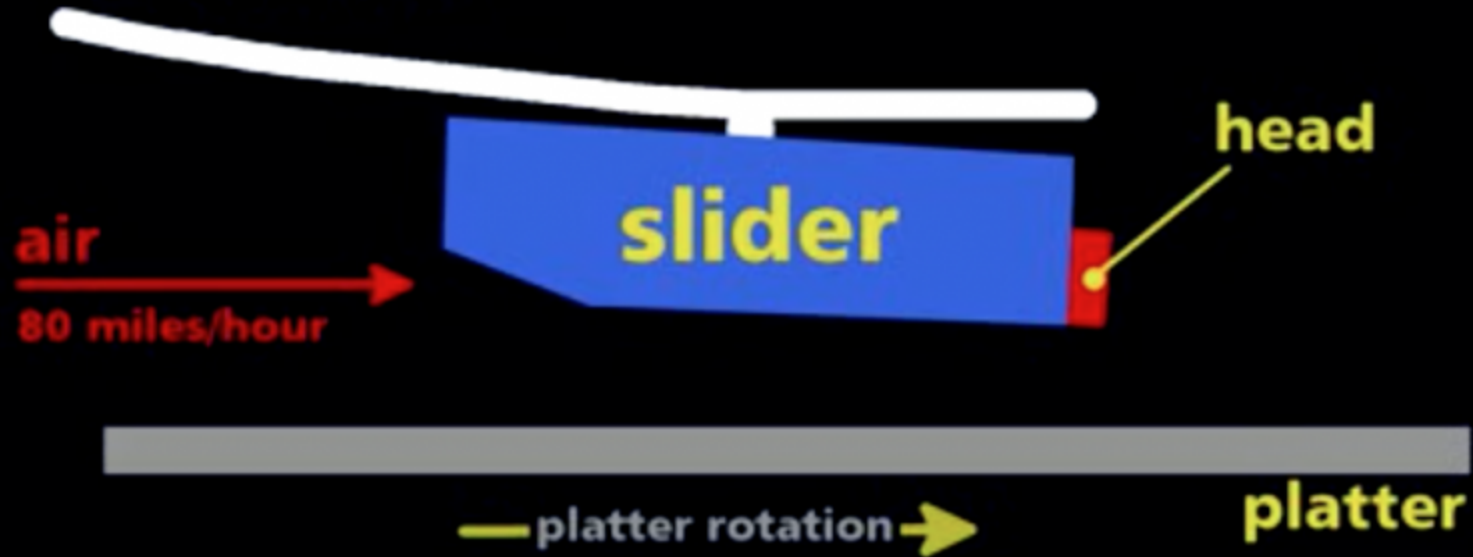
10 nm

platter





Suspension



head

slider

air
80 miles/hour

platter rotation →

platter

Carbon Overcoat

tough layer with lubricant
to reduce wear

Magnetic Layer

Chromium

Aluminium

low density, rigid,
& low cost

Cobalt with platinum & nickel

Sputtered onto chromium, which provides
grained surface that is replicated in magnetic
layer, which helps reduce signal noise

Platter

The diagram illustrates the layered structure of a hard drive platter. It consists of four overlapping circular layers, each with a central hole. From left to right, the layers are: a brownish-yellow Carbon Overcoat, a teal Magnetic Layer, a purple Chromium layer, and a light blue Aluminium layer. The layers are shown in a perspective view, overlapping each other. A red arrow points from the text 'Cobalt with platinum & nickel' to the Magnetic Layer.

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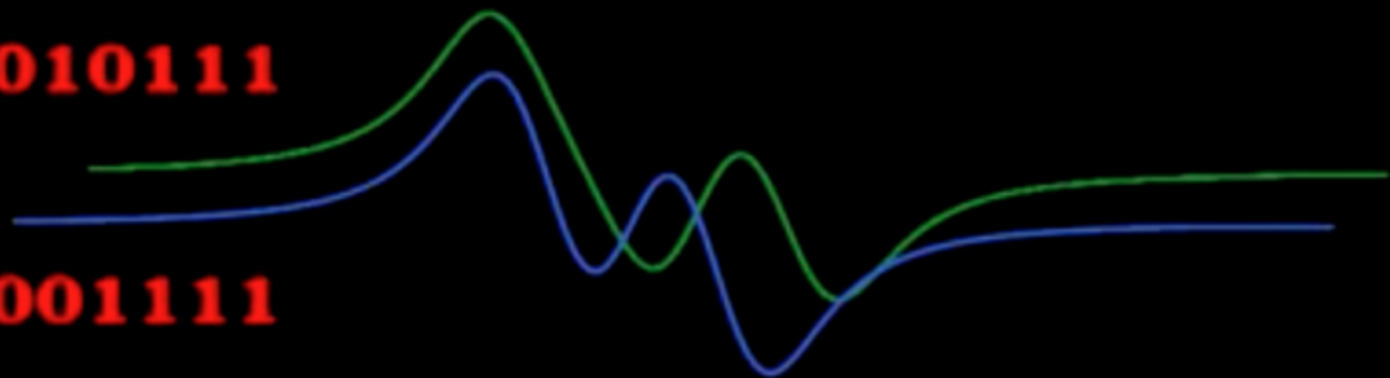
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Partial Response Maximum Likelihood

010111

001111



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010111

001111

