

A person wearing dark blue fingerless gloves is typing on a laptop keyboard. The scene is set in a dark room, with the laptop's light illuminating the hands and the keyboard. The person is wearing a dark blue long-sleeved garment.

*“Your own Self-Realization is the greatest service you can render the world.”*  
— Ramana Maharshi

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Scientists Syukuro Manabe, Klaus Hasselmann and Giorgio Parisi have jointly won the 2021 Nobel Prize in Physics. They won the prize for their work to understand complex systems such as Earth's climate.

Manabe is an American citizen while Hasselmann is German and Parisi is Italian.

The Royal Swedish Academy of Sciences said that they have honoured Manabe and Hasselmann jointly for their work that has helped develop computer models of Earth's climate. This could predict the impact of global warming.

## 2021 Nobel Prize in Physics awarded for climate science research

Their research

Syukuro Manabe showed how increased levels of carbon dioxide in the atmosphere could lead to warmer temperatures at the surface of Earth. Then, he developed physical models of the climate. About 10 years later, Klaus Hasselmann created a computer model that linked together weather and climate.

Giorgio Parisi's work is slightly different. His experiment involves a metal alloy called spin glass.

The behaviour of the atoms in this alloy is seen as a microcosm for the complex functioning of Earth's climate.

What is a microcosm?

A microcosm is something that is a small example of something larger.

The prize would normally be awarded in Stockholm, Sweden in December. But due to the pandemic, instead, the winners will receive their medals and



awards in their home countries.

After the Nobel Prize in Physics announcement today, they will announce the Nobel Prize in Chemistry tomorrow.

## The largest comet ever discovered approaches our Sun

The largest comet ever discovered is coming towards the Sun and could arrive in about 10 years. The comet is known as the Bernardinelli-Bernstein comet (or C/2014 UN271).

How big is the Bernardinelli-Bernstein comet?

It is at least 62 miles (100 kilometres) across. That's about 1,000 times bigger than a usual comet. Its discovery was announced in June 2021.

The largest comet is moving rapidly through the Oort cloud. This is a vast area of icy rocks, billions of kilometres from Earth in the outer parts of the solar system.

What are scientists saying?

For now, astronomers feel that the huge rock poses no threat to Earth. Right now, the largest comet is travelling through the Oort cloud at a speed of about 29 times astronomical units or AU (an AU is the distance between Earth and the Sun).

The comet's closest approach to Earth will occur around 2031. It will be quite far and humans won't be able to see it without telescopes.

Its last visit

Scientists say that the last time the largest comet came close to our Sun was 3.5 million years ago. Since then, the comet has travelled as far as 40,000 AU away.

The Dark Energy Survey (DES) is helping us learn more about the largest comet. This is a project to study the expansion of the universe and it ran between August 2013 and January 2019. During the survey, astronomers mapped 300 million galaxies. Over the next ten years, astronomers will keep studying it and we will learn more.

## Cyber crime introduction

Cyber crime is not an old sort of crime to the world. It is defined as any criminal activity which takes place on or over the medium of computers or internet or other technology recognised by the Information Technology Act. Cyber crime is the most prevalent crime playing a devastating role in Modern India.

### Cyber obscenity

Cyber obscenity includes pornographic websites, pornographic online magazines and the internet to download and transmit pornographic pictures, photos

## Phishing

Phishing is a type of social engineering attack often used to steal user data, including login credentials and credit card numbers.



## Cyber-Stalking

the repeated use of electronic communications to harass or frighten someone, for example by sending threatening emails.



and writing. The photographs of women are used, morphed and distributed in the internet with obscene postures

## Computer vandalism

Computer vandalism is a process wherein there is a program that performs malicious function such as extracting a user's password or other data or erasing the hard disk. A vandal differs from a virus, which attaches itself to an existing executable program.

**Ransom ware**, a type of malicious software designed to block access to a computer system until a sum of money is paid. "although ransomware is usually aimed at individuals, it's only a matter of time before business is targeted as well"

## WORD OF THE DAY

Today's Word of the Day is "unmitigated" and its adjective meaning absolute; unqualified.

**Pronunciation** : ʌn'mɪtɪgeɪtɪd

**Usage:** 'the tour had been an unmitigated disaster'

## Origin

Unmitigated comes from the Latin roots un-, meaning "not," and mitigare, meaning "made mild, soft, or gentle." Perhaps because of these origins, although unmitigated can be used positively, as in unmitigated success, but the word is often paired more negatively.

### Synonyms :

absolute, unqualified, unconditional, categorical, complete, total, thoroughgoing, downright, outright, utter, out-and-out, unadulterated, unalloyed,

**Antonym:** partial

## Hindi Meaning

UNMITIGATED= पूरा [pr.{pura} ]  
(Adjective)

उदाहरण : यह कार्य पंचायत तथा सेंटर फॉर वर्ल्ड सॉलिडैरिटी की मदद से पूरा किया गया, जिसने इसे निवेश में मदद की

## ENGLISH CLUB

### Phrasal Verb- get back

**Meaning:** If you get something back, it is returned to you after you've lent it, lost it, or had it stolen.

**Usage:** If you leave something in a taxi, you might get it back if you call the taxi company.

## Today's Idiom

### Let Sleeping Dogs Lie

**Meaning:** its best to leave a situation as it is if disturbing it might cause trouble

**Usage:** Since my manager did not ask me anything about me coming late that day, I did not speak to him about it – it is best to let sleeping dogs lie.

## Saying of the Day

### A word to the wise is enough

Possible interpretation:

A very brief warning or explanation is enough for an intelligent person.

Note: the wise (noun): wise (intelligent) people | This proverb is also found as: "A word to the wise is sufficient."