



Lecture 2

KRISHNA CONCEPT OF

INFINITY

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THE SPIRIT OF BHAGAVAD GITA

sa evāyaṁ mayā te 'dya
yogaḥ proktaḥ purātaṇaḥ |
bhakto 'si me sakhā ceti
rahasyaṁ hy etad uttamam ||

- (*Bhagavad Gita 4.3*)

Translation - That very ancient science of the relationship with the Supreme is today told by Me to you because you are My devotee as well as My friend; therefore you can understand the transcendental mystery of this science.

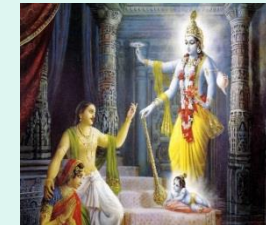
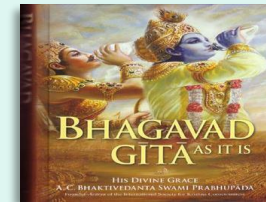
Language of Bhagavad Gita is that of Devotion / surrender

One must surrender to Lord Krishna to understand His teachings – message of Bhagavad Gita

mattaḥ parataram' nānyat
kiñcid asti dhanañ-jaya
mayi sarvam idam' protam'
sūtre maṇi-gaṇā iva

BG 7.7: O conqueror of wealth, there is no truth superior to Me. Everything rests upon Me, as pearls are strung on a thread.

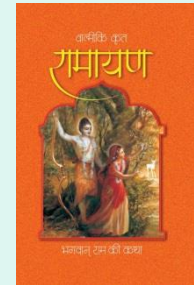
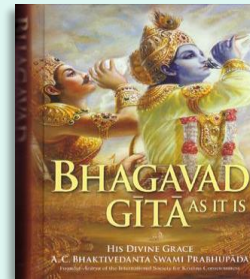
- Empirical Evidence
- Holy Books
- God Himself Incarnates
- Seers of Truth
- Self Realization



How to Know about God?

Divine Revelation: The holy books

- Bhagavad Gita, Vedas
- Bible
- Quran
- Srimad Bhagavatam
- Ramayana, Mahabharat
- Guru Grantha Saheb



How to know about God

Divine Revelation: Seers of Truth



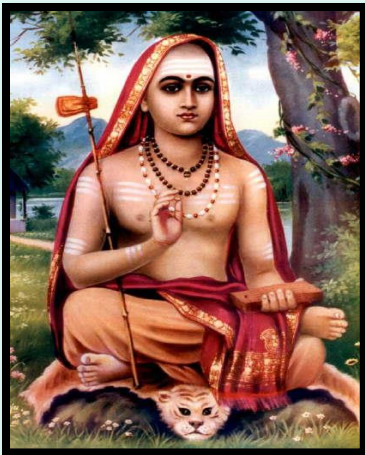
Arjuna



Bhishma



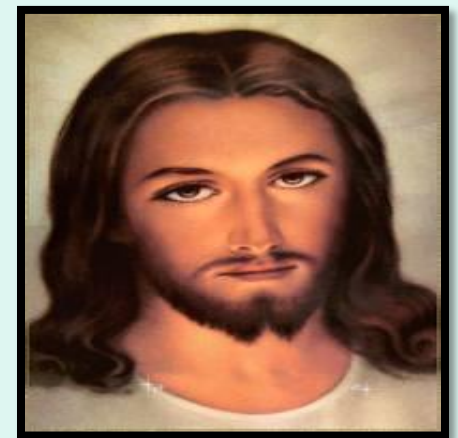
Shri Chaitanya Deva



Adi Shankaracharya



Narada

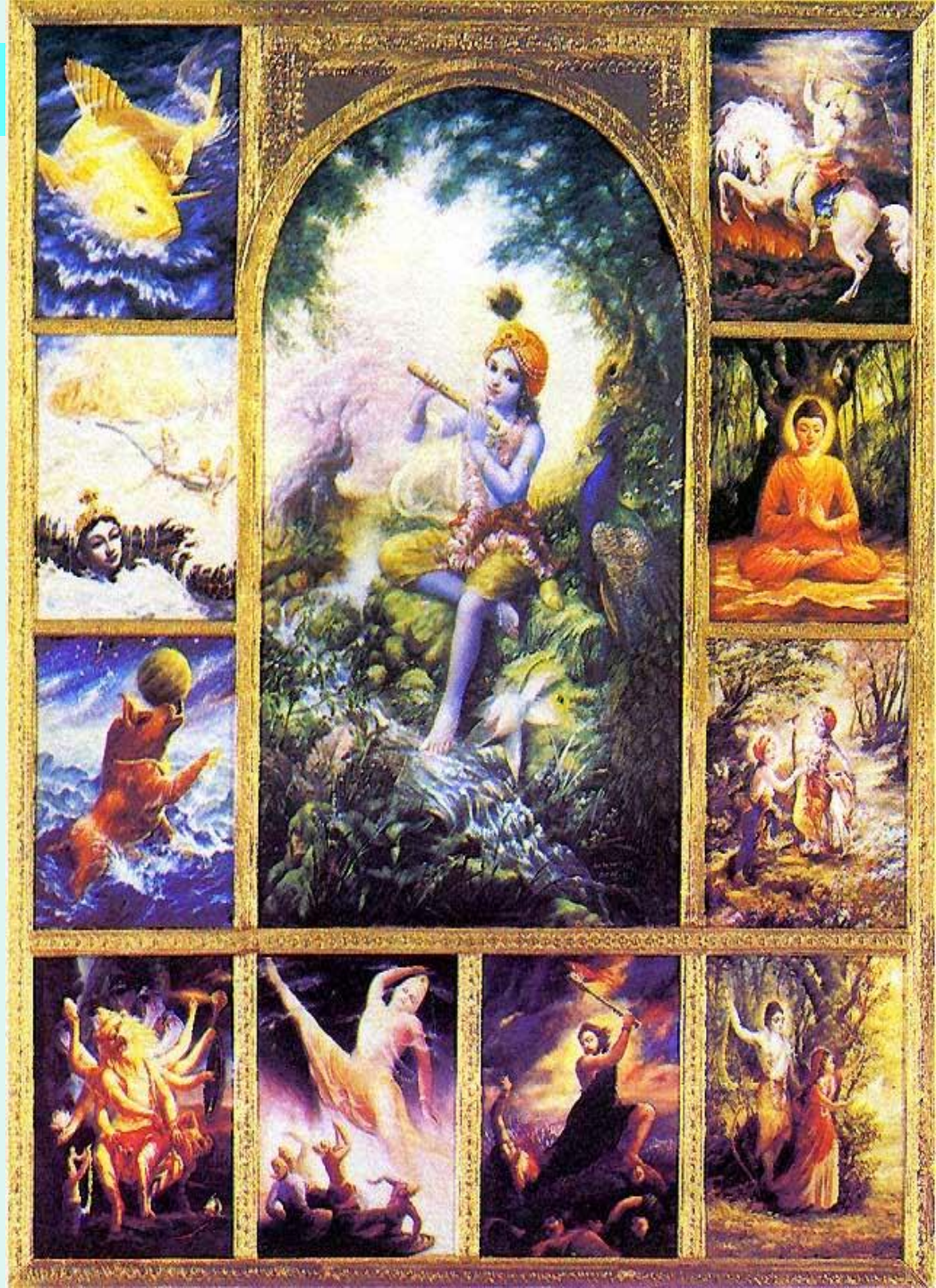


Jesus

How to know about God

God comes Himself
(sambhavami yuge yuge)

- Lord Krishna
- Lord Rama
- Lord Narasimha
- Lord Varaha
- Lord Kurma
- Lord Parasurama
- Lord Buddha



How to know about God

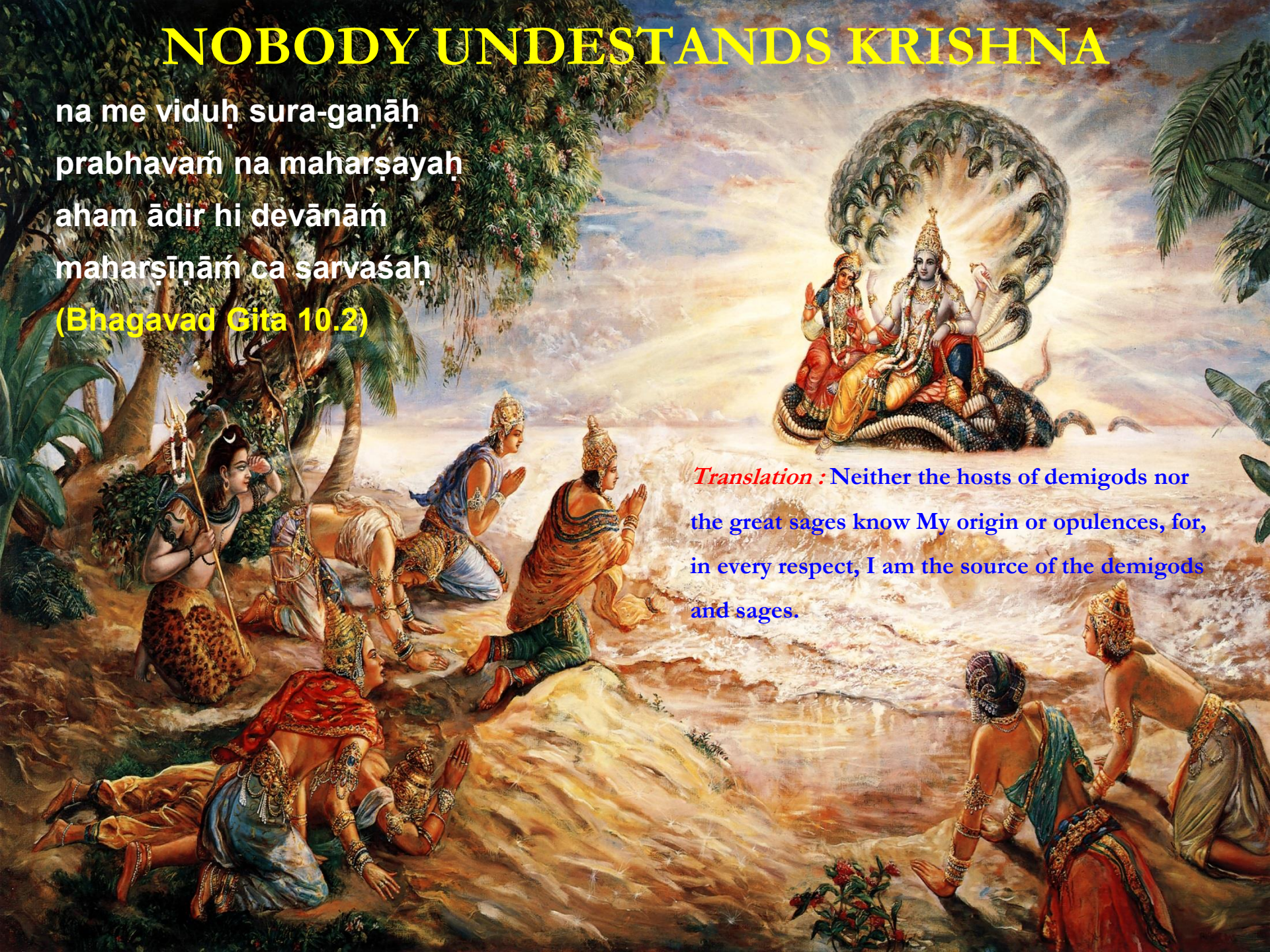
Ultimate Divine Revelation: Direct Perception

- The ultimate perfection
- But you need qualification
- Chapter 12 enumerate spiritual qualities of those who seek Truth and go through divine transformations



NOBODY UNDESTANDS KRISHNA

na me viduḥ sura-gaṇāḥ
prabhavaṁ na maharṣayaḥ
aham ādir hi devānām
maharṣīnām ca sarvaśaḥ
(Bhagavad Gita 10.2)



Translation : Neither the hosts of demigods nor the great sages know My origin or opulences, for, in every respect, I am the source of the demigods and sages.

KRISHNA – SOURCE OF EVERYTHING THAT EXIST

**aham̐ sarvasya prabhavo
mattaḥ sarvaṁ pravartate
iti matvā bhajante mām̐
budhā bhāva-samanvitāḥ
(Bhagavad Gita 10.8)**

Translation: I am the source of all
spiritual and material worlds.
Everything emanates from Me.
The wise who perfectly know this
engage in My devotional service
and worship Me with all their
hearts.



KRISHNA SUSTAINS EVERYTHING EFFORTLESSLY

atha vā bahunaitena kiṁ jñātena tavārjuna
viṣṭabhyāham idaṁ kṛtsnam ekāṁśena sthito jagat

(Bhagavad Gita 10.8)



Translation: But what need is there, Arjuna, for all this detailed knowledge? With a single fragment of Myself I pervade and support this entire universe.

WHAT IS INFINITY?

➤ Is 10^{999} Infinity?

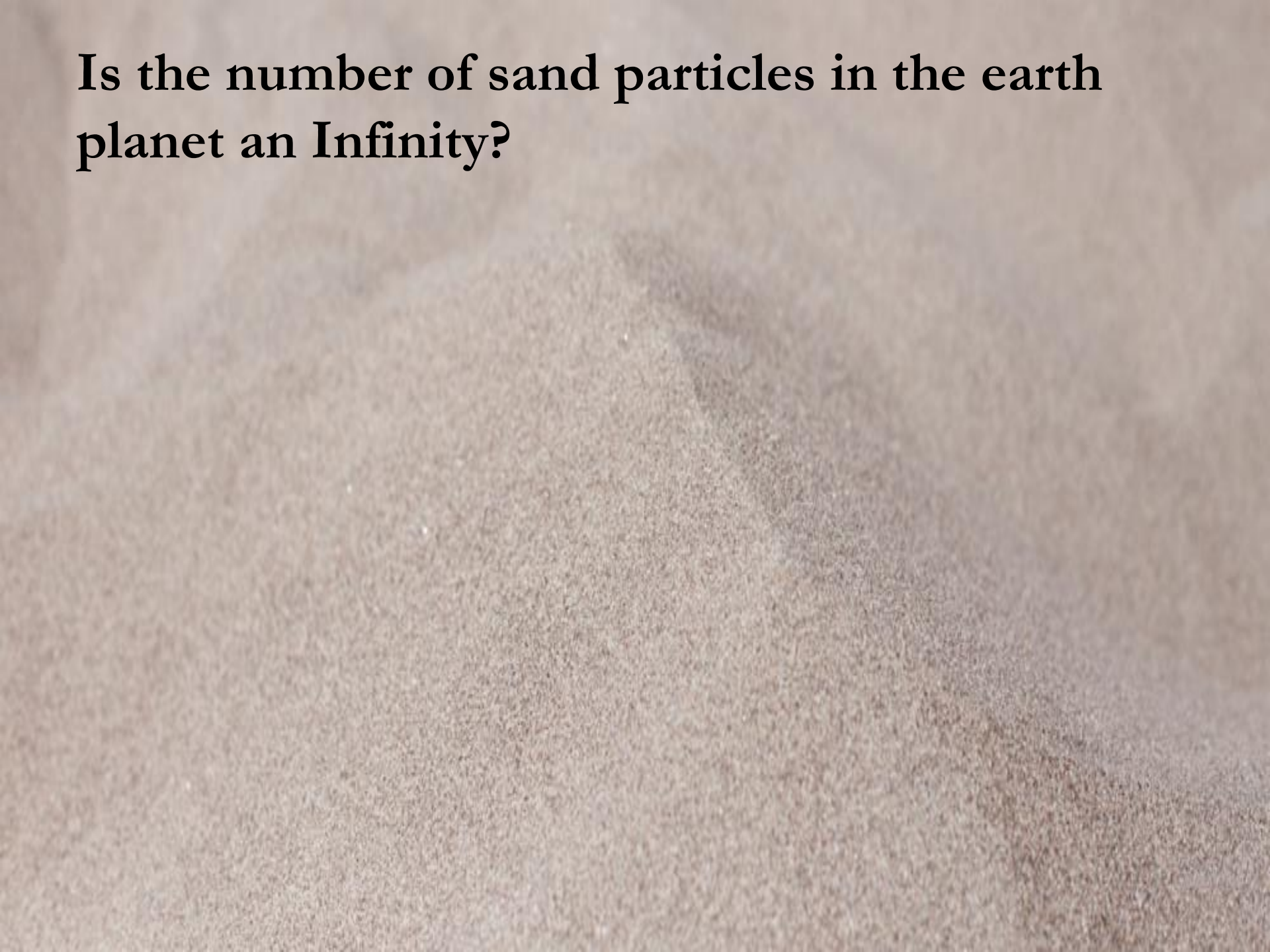
WHAT IS INFINITY?

- Is 10^{999} Infinity?
- Is 10^{999999} Infinity?

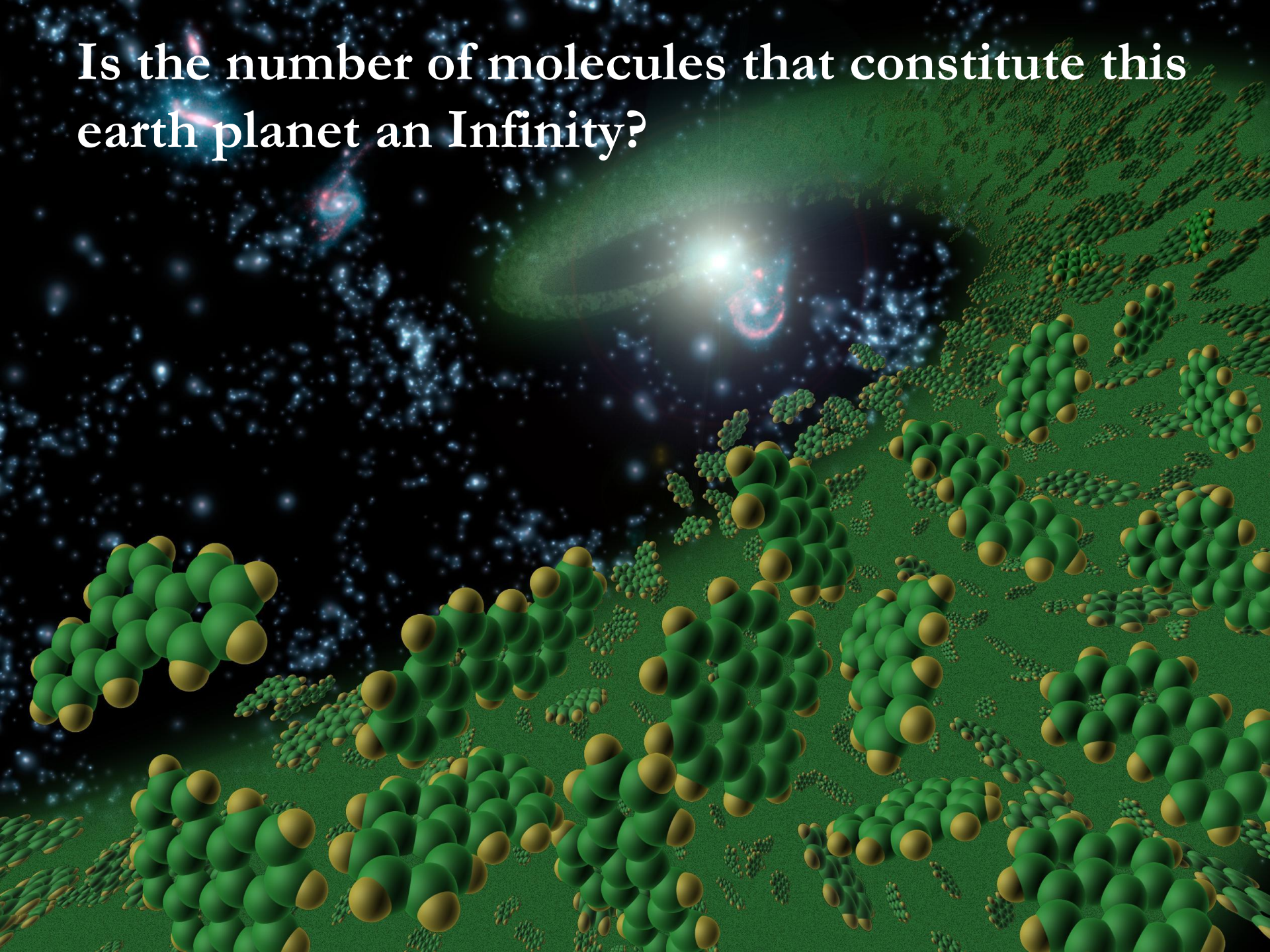
WHAT IS INFINITY?

- Is 10^{999} Infinity?
- Is 10^{999999} Infinity?
- Is $999999!$ an Infinity?

**Is the number of sand particles in the earth
planet an Infinity?**



Is the number of molecules that constitute this earth planet an Infinity?

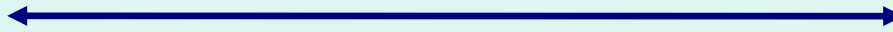


➤ Is the number of photons being emitted by all luminaries in this Universe an Infinity?



Cont..

Which one has more number of points over it?



Cont..

Which one has more number of points over it?

➤ A segment of length 1cm



Cont..

Which one has more number of points over it?

- A segment of length 1cm



- Or a segment of length 10cm



Cont..

Which one has more number of points over it?

- A segment of length 1cm



- Or a segment of length 10cm



- Or a line of infinite length

PRE CANTOR VIEW

Infinity only in numerical sense

- But Actual infinity and the use of the symbol ∞ in arithmetic was rejected.
- Infinity was seen as just a very large number!



9999999999.....

CANTOR'S NEW LOOK AT THE INFINITE

- Accepted actual infinity as a full-fledged mathematical object, perceived as a whole.
- Denial of actual infinity means denial of irrational numbers.

$$\sqrt{2} = 1.4142135623 \dots \infty$$

- Not just one class of infinity, but a hierarchy of infinities.

COUNTING THE NUMBER OF ELEMENTS

Counting is a process of establishing
one-to-one correspondence

between elements of two sets.

E.g. The sets $\{A,B,C\}$ and $\{1,2,3\}$ have same size, as

$A \leftrightarrow 1$

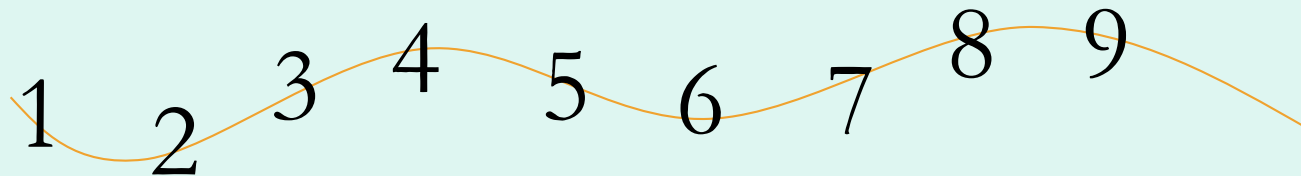
$B \leftrightarrow 2$

$C \leftrightarrow 3$

Cont..

Now consider the two sets:

Natural numbers:



Even numbers :



Which one is larger?

Cont..

We can establish a one-to-one correspondence between the two sets as

$$1 \leftrightarrow 2$$

$$2 \leftrightarrow 4$$

$$3 \leftrightarrow 6$$

:

:

Hence both have same size!!

Cont..

- Similarly, we can show that
 - Odd numbers
 - Perfect squares
 - Prime numbers

All have same number of elements!!

Thus the popular intuitive notion that “the whole is greater than the part” was refuted.

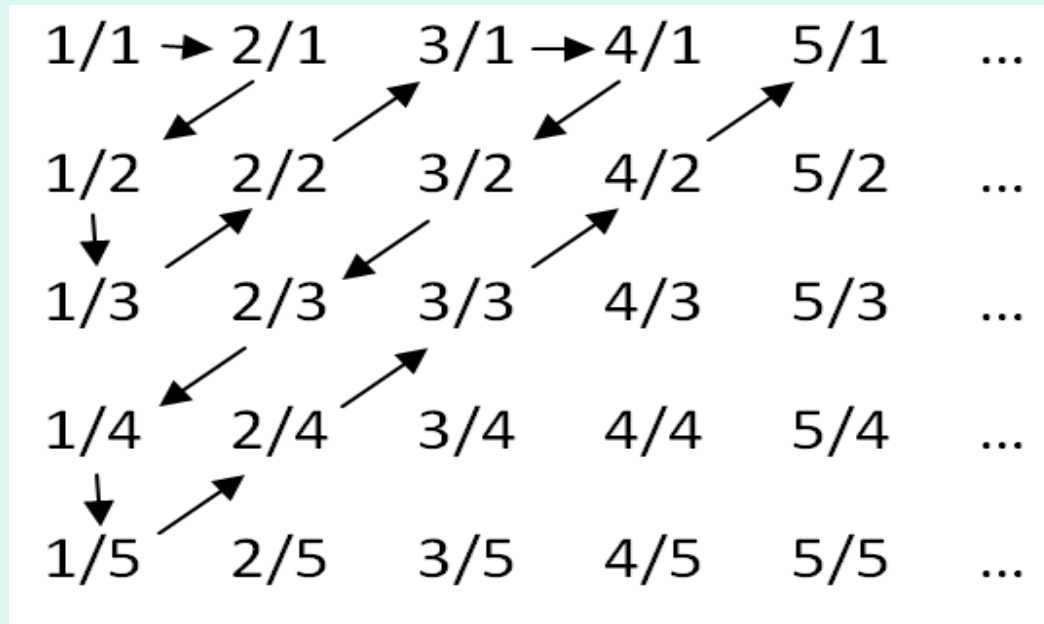
- Why should the infinite obey the same laws as the finites do?
- Intuition seems to be a very poor guide when dealing with the infinite.

SIZE OF RATIONAL NUMBERS

Rational numbers have the property that between any two rational numbers, there exist infinitely many rational numbers.

- Then what is the comparison between total number of rational numbers to the total number of natural numbers?

Cont..

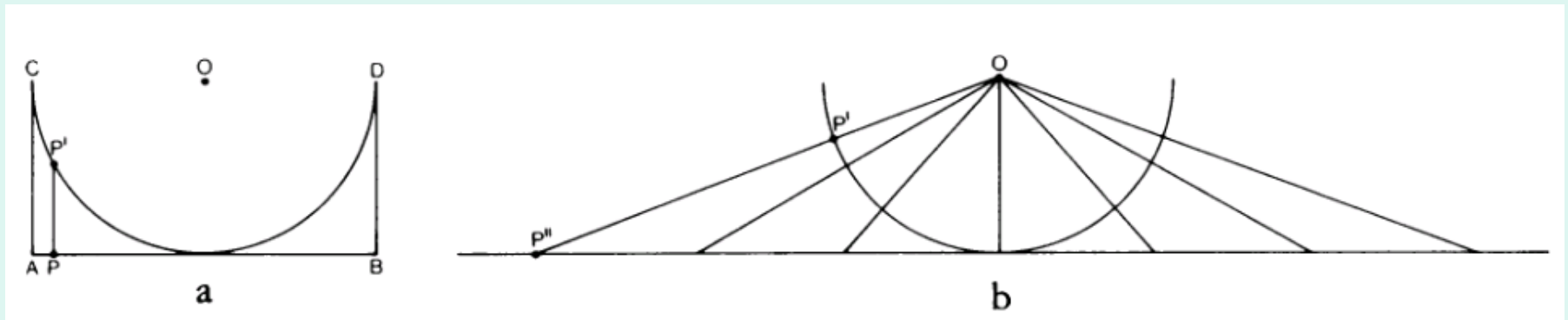


- ✓ Hence, we can count the rationals.
- ✓ Hence, both rational and naturals have same size.

“I see it, but I don’t believe it” - Cantor

CAN WE COUNT THE REALS

- There are as many points along an infinite straight line, as there are on a finite line segment of it.



- Our conception of a line being made of many dots of ink is fundamentally wrong.
- So the number of all the reals is equal to the number of all reals in $(0,1)$

DO WE REALLY UNDERSTAND THE INFINITY??

1 2 3 4 5 6 7 8 ... and suddenly ∞

- What happens at the ‘...’ – the paradox of heap
- What amount should we add to make it ∞ ?
- All the numbers following arithmetic laws, but then suddenly, how no laws?

LAWS OF INFINITIES

- **Absolute Truth is inexhaustible – any amount of infinities when taken from Him, He remains full and complete – purnam.**
- **He pervades everywhere – all atoms, spirit souls, space and time.**
- **He senses His creation without any error.**
- **He is in perfect control of His creation.**

*oṃ pūrṇam adaḥ pūrṇam idaṃ
pūrṇāt pūrṇam udacyate
pūrṇasya pūrṇam ādāya
pūrṇam evāvaśiṣyate*

(Sri Isopanisad Invocation Mantra)

The Personality of Godhead is perfect and complete, and because He is completely perfect, all emanations from Him, such as this phenomenal world, are perfectly equipped as complete wholes. Whatever is produced of the Complete Whole is also complete in itself. Because He is the Complete Whole, even though so many complete units emanate from Him, He remains the complete balance.



INCONCEIVABLE INFINITY



INFINITY

➤ **BG 11.12**

If hundreds of thousands of suns were to rise at once into the sky, their radiance might resemble the effulgence of the Supreme person in that universal form.

➤ **BG11.16**

O Lord of the universe, O Universal form, I see in your body many, many arms, bellies, mouths, and eyes, expanded everywhere, without limit. I see in You no end, no middle and no beginning.

INFINITY IS PERCEIVED EVERYWHERE

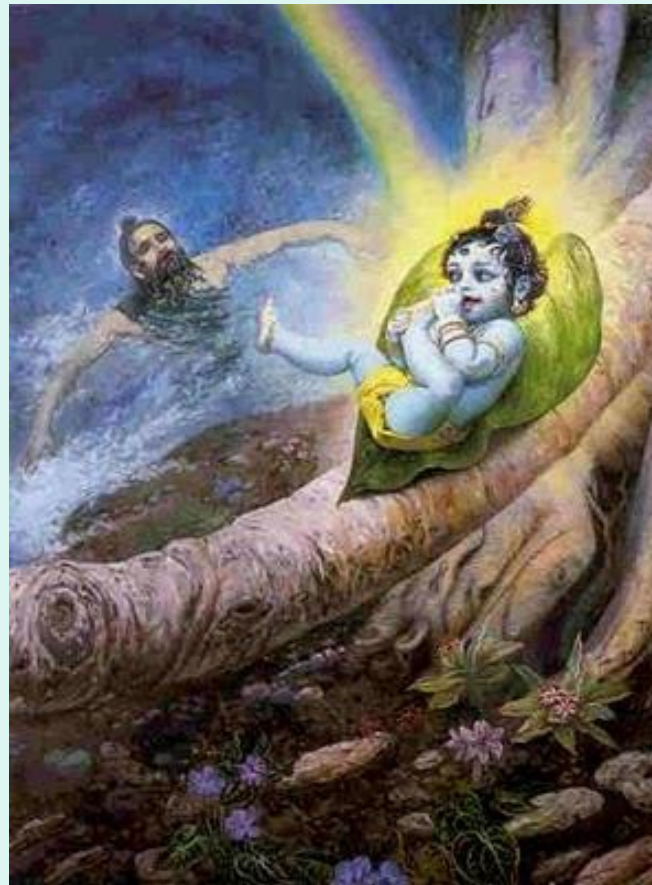
- We describe the world because the world is indescribable.
- The all-pervading nature of space makes us link finite to infinite.
 - An atom has not been yet described.
 - A Cell has also not been described.
 - So also the cosmos....
 - So also the consciousness
 - The more one tries to understand the more it becomes elusive.

INFINITY INSIDE INFINITY

*No difference between
INSIDE and
OUTSIDE of infinity*



CONTEMPLATING INFINITE



Assume one jiva goes back to spiritual world in 4,320,000 years and the time is infinite – Markandeya Rsi

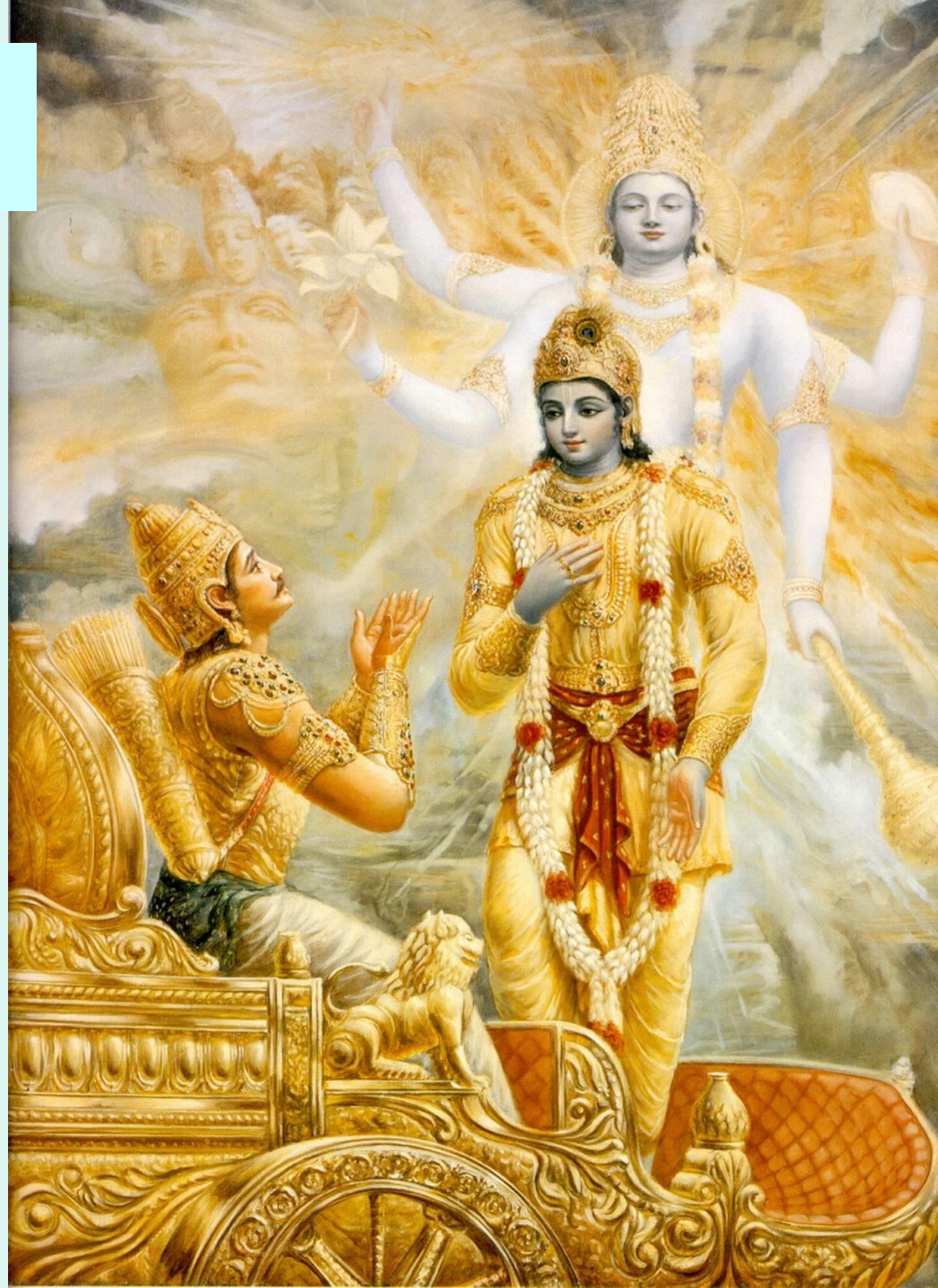
*guṇātmanas te 'pi guṇān vimātuṁ
hitāvatīrṇasya ka īsire 'sya
kālena yair vā vimitāḥ su-kalpair
bhū-pāmśavaḥ khe mihikā dyu-bhāsaḥ
(Srimad Bhagavatam 10.14.7)*

In time, learned philosophers or scientists might be able to count all the atoms of the earth, the particles of snow, or perhaps even the shining molecules radiating from the sun, the stars and other luminaries. But among these learned men, who could possibly count the unlimited transcendental qualities possessed by You, the Supreme Personality of Godhead, who have descended onto the surface of the earth for the benefit of all living entities?

WE HAVE A RELATION WITH THE INFINITE

Infinite is very gracious and
compassionate.

suhṛdaṁ sarva-bhūtānāṁ – The
Best Friend of all (BG 5.29)



CONCLUSION

- Infinity as embedded in the Absolute Truth can not be understood by laws of finites.
- However, Infinite is ever gracious to empower the infinitesimal through direct revelation.
- BG informs us about Krishna concept of Infinity the search for which leads to self-realization as well as perfection.
- God pervades through His creation, thus every aspect of creation will remain elusive in spite of our best efforts.
- Seers of Truth, holy books and spiritual masters are three sources to get knowledge of Absolute Truth.

QUESTIONS

- Enumerate three empirical evidences with examples that reveal God's existence.
- Knowledge of God is obtained through divine revelations. Enumerate these sources of divine revelations.
- What are laws of infinities?
- The world remains elusive – how hard we may try to describe it. Explain.

QUESTIONS

- How does BG inform us about Krishna concept of Infinity.
- Explain Krishna concept of Infinity through the event of mother Yashoda looking into Krishna's mouth.
- Absolute Truth is never in-exhaustible – explain.
- Why is there scarcity in this world even if Krishna is inexhaustible?