Lecture 1 — Inaugural session + Prof. M.D. Srinivas's special lecture

The opening day. The first hour is the inaugural function; the rest is Prof. M.D. Srinivas's keynote, "Indigenous Development of Scientific Astronomy in India," which lays the historiographical groundwork — how India's pre-Common-Era astronomy was long misread as borrowed from Mesopotamia/Greece, and what the texts actually show.

▸ Part A — Inaugural function

- 3:53 — Opening; ceremonial lamp-lighting and invocation
- 8:09 — Dr. Shankar Rajaraman (Director, CAHC) welcome address; on CAHC and its work; introduction of the guests
- 15:48 — Inaugural address by Prof. M.D. Srinivas: how Indian pre-CE astronomy was studied and misread as "borrowed from the West"
- 34:26 — Presidential address by Dr. Jitendra Kumar Mishra (acting VC): learning at the centre of IKS; the multi-millennial arc of Indian astronomy
- 48:16 — Prof. R.N. Iyengar on the workshop's origins: CAHC from 2011, the 2018 paid weekend course, the manuscript-access struggles, the 2023 Vedic-scholars meeting, and this national workshop
- 1:06:05 — Vote of thanks; tea break

▸ Part B — Special lecture, Prof. M.D. Srinivas: "Indigenous Development of Scientific Astronomy in India" *(~1:08 – end)*

- 1:08:29 — The lecture's frame; historiography and the Western-borrowing thesis (Neugebauer, Pingree's "five intrusions")
- 1:18:00 — Pre-CE content: Vedic mathematics & observational astronomy; the pole star Abhaya-Dhruva / Alpha Draconis (~2850 BCE) in Śiśumāra; Maitrāyaṇīya & Mahāsalilam placing summer solstice at Maghā (~1600 BCE)
- 1:23:47 — Jacobi vs Whitney/Keith on whether the Veda knows Dhruva; Iyengar's 30–40 Ṛgvedic instances
- 1:26:18 — Parāśaratantra & Mahāsalila: solstices/equinoxes ~1300 BCE; ṛtus named by nakṣatra; comets as ketu
- 1:33:56 — Lagadha's Vedāṅga-Jyotiṣa: the 5-year yuga, the rule of three, and the daylight-length formula whose 35° fit was misused to claim Mesopotamian origin (the debunk)
- 1:40:00 — The Indian calendar: solar/tropical year, lunar month, adhika-māsa; the Uttarāyaṇa vs Makara-Saṅkramaṇa confusion

- 1:47:14 — Siddhāntic development: Varāhamihira's Pañcasiddhāntikā, Āryabhaṭa, Brahmagupta; transmission westward (al-Khwārizmī → "algebra," "algorithm")
- 1:52:49 — Nīlakaṇṭha's latitude insight: the Śīghroccas of Budha & Śukra are the planets themselves (their heliocentric periods) — the major indigenous discovery
- 1:57:44 — Q&A: Romaka/Pauliśa siddhāntas; rāśi-based astrology as the genuinely foreign import; the Pingree / Yavanajātaka critique

Lecture 2 — Inauguration (afternoon) + first lecture

The opening afternoon. After lunch and logistics, Iyengar frames the workshop as interactive (questions expected, not a lecture course); participants introduce themselves; the Chairman addresses the participants on reviving Indian intellectual tradition and IKS. Iyengar then opens the course proper — how to approach "before Common Era" astronomy through the Vedic source texts — covering the tripartite universe, the Nirukta's "three devas suffice" argument, the classification of the Vedas and Vedāṅgas, the Ṛgveda 10.72 cosmogony, and the first key numbers (15, 30, 360, 3339).

- 0:06 — Logistics; "this is an interactive workshop" *(Iyengar)*
- 6:00 — Participant self-introductions begin (~30 people, 14 states)
- 23:55 — Founder-chairman Dr. Chenraj Roychand's address (IKS, tradition, values)
- 38:00 — Iyengar resumes; course framing
- 41:00 — Tripartite universe: dyauḥ / antarikṣa / pṛthivī; the oral tradition
- 45:00 — Nirukta (Yāska): "three devas are sufficient"; numbers underlie devatās
- 57:20 — Timeline of the Vedic + intellectual traditions; NEP motivation; Sāyaṇa's commentary
- 1:06:00 — Classifying the Vedas (Saṃhitā / Brāhmaṇa / Āraṇyaka / Upaniṣad) and the śākhās
- 1:12:00 — *(after tea)* The six Vedāṅgas; Jyotiṣa; Lagadha, Parāśara, *Mahāsalila*
- 1:51:50 — Ṛgveda 10.72 cosmogony: Uttānapāda, Aditi, Dakṣa (Griffith vs Dīkṣit readings)
- 2:22:30 — Numbers 15 / 30 / 360; the Prajāpati legend; 3339 foreshadowed
- 2:30:00 — Closing Q&A (Bhṛgu = Śukra, etc.); Stellarium announced for the next day

Lecture 3 — Indra, soma, 3339 & the Saros cycle

A dense methods lecture on extracting astronomy from Vedic texts. Iyengar reads Indra's soma-drinking three ways (herb / moon / mind) and uses the principle that a devatā is fixed by *location* + *number* + *action* to decode the number 3339 of the Viśvedevas as an eclipse (Saros) count. He ties this to the dārśa-paurṇamāsa ritual and its dārvī figure, derives that figure from the Śulba Sūtras (squaring the circle, √2, Baudhāyana's theorem), and links the 18-year and 5-year cycles to calendar intercalation and the Rāhu period.

- 1:00 — Recap: earth = mother, dyaus = father; numbers + devatās as the key
- 5:21 — Indra and soma; "who is Indra?"
- 8:07 — Three readings of soma: herb / moon / manas; the "intoxicant" reading rejected
- 17:31 — Rūpasamṛddhi (the correspondence principle), from the Aitareya Brāhmaṇa
- 21:55 — Soma legend; Indra "drinks 30 measures" = 15 + 15 of the dark fortnight
- 35:55 — The number 3339 of the Viśvedevas (Ṛgveda 10.52); Bṛhaddevatā
- 1:03:00 — 6678 = 371 × 18 → 223 synodic months = the Saros (18-yr eclipse) cycle
- 1:09:18 — Connecting it to ritual: dārśa-paurṇamāsa and the dārvī (vedi) figure
- 1:17:18 — Śulba Sūtra construction of the dārvī; area ≈ 3339; squaring the circle ($\pi \approx 3$)
- 1:28:00 — Moon's standstill / ayana plotted → the "snake/doll" figure; archaeoastronomy
- 1:48:00 — Calendar: intercalation, 15-/30-year satras, lunar 360 vs solar 371 tithis
- 1:53:46 — Rāhu's 18-year daśā; the 5-year pañcavatsara calendar
- 1:59:43 — Baudhāyana theorem; √2 approximation; the Purāṇic "critical edition" plea
- 2:07:24 — Closing: a Taittirīya Brāhmaṇa mantra read as a sun–moon eclipse; Q&A to lunch

Lecture 4 — Dhruva, Śiśumāra & precession + first Stellarium tutorial

Prof. R.N. Iyengar's pole-star lecture, then Sunder Chakravarty's first Stellarium tutorial.

▸ **Session A — Prof. R.N. Iyengar: Dhruva, Śiśumāra & precession** *(0:05 – ~1:13:40)*

Iyengar turns to the pole star. He tells the Purāṇic Dhruva legend, then poses the real puzzle — today's pole star isn't the one the Purāṇas describe, and for roughly 3,000 years there was *no* true pole star — and uses precession to date the Śiśumāra (Draco) figure and its star Dhruva to ~2830 BC. He then traces the idea forward through the Maitrāyaṇī, the Mahābhārata, Śaṅkara, Alberuni and Kamalākara, showing how Meru–Dhruva cosmology and the marriage-time Dhruva-darśana survived even after the star itself drifted off the pole.

- 1:19 — The Purāṇic legend of Dhruva (Uttānapāda, the two queens, tapas, Viṣṇu, becomes the pole star)
- 5:22 — The real question: today's pole star ≠ the ancient one; no true pole star ~1500 BC–1500 AD
- 7:45 — Why this matters for chronology/dating (caution on unscientific Mahabharata "anchor dates")
- 8:58 — Precession video: earth's three motions; the ~26,000-year pole circle
- 12:06 — Thuban (α Draconis) as pole star ~3000 BC = the Śiśumāra / Draco "dragon," Dhruva its 14th star
- 15:03 — The Taittirīya Āraṇyaka mantra describing the Śiśumāra figure (still recited in the south)
- 23:46 — Dating the figure (14 stars, dragon shape) to ~2830 BC — the earliest datable star-group
- 32:14 — Brahmāṇḍa Purāṇa's Meru-centric model (oil-mill / potter's-wheel analogies); the fixed Nābhi
- 35:08 — "Dhruva fixed yet rotating" → a possible source of Āryabhaṭa's earth-rotation idea
- 43:34 — *(after tea)* Maitrāyaṇī: King Bṛhadratha's vairāgya; "even Dhruva moves"; precession felt
- 49:02 — Mahābhārata's Śiśumāra-town and Arjuna's rotating-fish target as precession memory
- 54:53 — Later witnesses: Śaṅkara's Viṣṇusahasranāma gloss (8th c.), Alberuni (11th c.), Kamalākara (17th c.)
- 1:05:34 — Summary: 5,000 years of Dhruva; Kālidāsa's Kumārasambhava; closing Q&A

▸ Session B — Sunder Chakravarty: Stellarium tutorial (Meru, Dhruva, precession) *(~1:13:46 – 2:42)*

Sunder gives the first hands-on demo, visualising what Iyengar described. He runs an animation that builds the cosmos step by step (Mahāsalilam → earth → four dvīpas → Meru → 27 nakṣatras → sun), then walks through Stellarium on phone, web and desktop — sky cultures, finding stars and planets, and especially precession. He closes on the nakṣatra-vs-sector ambiguity and the nakṣatra–season fitting method the group uses to date texts.

- 1:13:46 — Sunder takes over; plan for the demo sessions
- 1:15:06 — Meru animation: Mahāsalilam → Pṛthivī → 4 dvīpas (Jambu, Prāgjyotiṣa, Uttarakuru, Ketumāla) → Dhruva → Meru → 27 nakṣatras → Sun
- 1:16:38 — Sun makes day/night; moves ~1 nakṣatra per 13 days (~360-day circuit)
- 1:20:47 — Sun's annual path: the two ayanas + two equinoxes; the "pulsing" up–down orbit
- 1:28:09 — Stellarium tour: phone / web / desktop versions
- 1:32:35 — Precession & frozen conventions: equinox now at Bhādrapada but we still say Aśvinī (frozen ~285 AD); the Jan-14 Uttarāyaṇa drift
- 1:38:43 — Dhruva gives your latitude (13° Bangalore, 28° Delhi); Śiśumāra clearer up north
- 1:40:03 — Desktop Stellarium: grids, sky cultures, his AI-built "Vedic Codex"; precession circles; orthographic view
- 1:46:29 — Indian nakṣatra terms inside the Mongolian sky culture (eastward spread)
- 1:48:55 — Scripted Dhruva-shift movie (2850 BC pole vs Polaris); long Q&A on precession geometry (1°/72 yrs, obliquity)
- 2:10:41 — Nakṣatra as visible star-group vs 13°20′ sector; Maghā's six stars; Abhijit
- 2:26:14 — Dating texts by nakṣatra–season fit (the core method); Abhijit's elision; equal vs unequal nakṣatras
- 2:35:22 — Wrap + Q&A: six ṛtus, Uttarāyaṇa Dec 21 vs Jan 14, Makara

Lecture 5 — The nakṣatra system, calendar & ṛtus; intro to the VGJ

Iyengar builds the nakṣatra system: why the moon needs star-asterisms as a fixed coordinate background, the two lunar cycles (sidereal 27/28 and synodic ~29.5), and how the seasons and intercalation forced a move from pakṣa-reckoning to a solar-anchored calendar. He covers heliacal rising and the "morning nakṣatra," then the equinoctial full-moon dating method (Kṛttikā ¼ opposite Viśākhā ¾ → the ~1800 BC "Maghādi" epoch), and finally introduces the Vṛddha-Gārgīya-Jyotiṣa (VGJ) as a primary Vedāṅga-Jyotiṣa text.

- 0:06 — Recap: Saptarṣi (Ursa Major), the seven ṛṣi names; ṛkṣa = bear/star
- 4:11 — Nakṣatras as asterisms along the ecliptic; why a fixed "coordinate" background is needed
- 8:48 — Watching the moon: the two cycles (sidereal 27/28, synodic ~29.5); pañcadaśī = amāvāsyā/pūrṇimā
- 15:24 — Seasons drive the calendar; the six ṛtus; "social determination" of seasons
- 18:41 — Intercalation; the Śatapatha deva–asura story; ṛtu-yajña
- 26:09 — Nakṣatra names in the Ṛgveda (Maghā, Phalgunī = Arjunī, Tiṣya); 28 in the Atharvaveda
- 43:04 — Heliacal rising; the "morning nakṣatra"; brāhma-muhūrta; why "lunar mansions" is wrong
- 56:49 — *(after coffee)* Months arrive only after ~1800 BC; pūrṇimānta vs amānta calendars
- 1:32:12 — Maitrāyaṇī's magha–śraviṣṭha; 27 ÷ 12 = 2¼ nakṣatra per rāśi (the seed of the rāśi system)
- 1:36:43 — Equinoctial full-moon method: Kṛttikā ¼ opposite Viśākhā ¾ → ~1800 BC "Maghādi" epoch (Brahmāṇḍa Purāṇa)
- 2:00:23 — Introducing the Vṛddha-Gārgīya-Jyotiṣa (VGJ); "continue after lunch"

Lecture 6 — VGJ & Parāśaratantra + second Stellarium tutorial

This continues straight from Lecture 5's lunch break: Iyengar finishes the VGJ/Parāśara material, then hands over to Sunder (~2:04) for the second Stellarium tutorial.

▸ **Session A — Prof. R.N. Iyengar: VGJ & Parāśaratantra** *(0:00 – ~2:03)*

A detailed look at the two main pre-CE Vedāṅga-Jyotiṣa texts Iyengar has edited. He explains how VGJ is dated by nakṣatra–season fitting (Ādityacāra ~1300 BC, Ṛtusvabhāva ~500 BC) and the Śraviṣṭhā-vs-Dhaniṣṭhā identification dispute, recounts the manuscript-hunting saga, walks the text's structure, then turns to Parāśaratantra and its ~1300 BC date.

- 0:04 — Resuming after lunch; scope: VGJ + Parāśaratantra
- 0:40 — VGJ's chronology; 125+ chapters, ~5000 verses, ~10% edited; the three key chapters
- 8:08 — Dating VGJ via nakṣatra positions in the six ṛtus → ~1300 BC; Śraviṣṭhā vs Dhaniṣṭhā
- 24:43 — The manuscript saga (Paris, Cambridge, Nepal, NLI Kolkata); editing a layered text
- 42:22 — First aṅga = nakṣatra-karmaguṇa (quality of action per nakṣatra); Kṛttikā = agni
- 46:25 — Kanyā (girls' education/marriage) in the older kalpa; ācāryā vs ācāryāṇī
- 52:11 — Tithi & karaṇa: karaṇa is older; the four pañcāṅga parameters
- 1:03:28 — Maximizing the four time-parameters = the philosophy of muhūrta astrology
- 1:29:23 — Parāśaratantra: prompted by the 1993 Killari earthquake; dated ~1350–1130 BC (William Jones, Utpala)
- 1:47:24 — Comets (26 ketus), ten eclipse types, six-monthly & penumbral (nirodha) eclipses; hands over to Sunder

▸ **Session B — Sunder Chakravarty: Stellarium 2 (moon & eclipses)** *(~2:04 – 3:06)*

The second demo focuses on the moon and on the analytical toolchain. Sunder visualises the moon's faster swing and the Brahmāṇḍa Purāṇa equinoctial full-moon condition, shows how astropy scans millennia for matching full moons (converging on ~1800 BCE), and demonstrates eclipse tools for Parāśara's six-monthly windows.

- 2:04:14 — Sunder resumes; recap of yesterday (Meru, Dhruva, precession, nakṣatras, dating)

- 2:08:23 — The moon's swing (larger and faster than the sun) and why it's numerically harder
- 2:14:31 — Brahmāṇḍa Purāṇa full-moon verses; scanning epochs → best fit ~1800 BCE
- 2:19:59 — Astropy method: all full moons → filter to equinox ±1 day → the ¼/¾ sector + visible-band test
- 2:26:14 — Maitrāyaṇīya "magadi" cross-check; orthogonal evidence converges on 1800 BCE
- 2:33:39 — Stellarium (visual) vs astropy (scanning); reliability limits (~3000 BC for sun/moon)
- 2:37:02 — Eclipse tools for Parāśara's six consecutive eclipses (1496 & 1442 BC windows)
- 2:52:04 — A 1980 total-solar-eclipse tribute; then the CAHC website, papers and AI-tool caveats

Lecture 7 — The *Mahāsalilam* book; Rohiṇī–Soma as the origin of Indian astrology

Centred on Iyengar's *Mahāsalila*. He defends the Vedic roots of Vedāṅga-Jyotiṣa against the "tithi is Babylonian" argument, distinguishes pre-siddhāntic / pre-horā astronomy, and walks the text — the grahas, the Mahāsalilam cosmogony, the moon's phases — building to the Rohiṇī–Soma legend, which he reads as the **origin of Indian astrology**: Soma's curse and his promise to move equally with all the nakṣatras turns single stars into the equal-sector nakṣatra system, after which nakṣatra-karma, devatā properties and graha disturbances yield mundane and natal astrology.

- 0:05 — The *Mahāsalilam* book; "this is the fourth day"; why linking Veda to Vedāṅga is hard
- 2:28 — How Lagadha's Jyotiṣa was retrieved (forgotten ślokas recited before meals); the Śraviṣṭhā question
- 13:01 — The "tithi is Babylonian" argument (Pingree, Neugebauer); Eggeling omitting "tithi" in translation
- 25:38 — Pre-siddhāntic vs siddhāntic; pre-horā (Vedic) vs horā astrology; jyotiṣa's three streams
- 31:55 — Tithi & karaṇa again; "tithi" first used as a limiter in *Mahāsalilam* (pūrṇa-tithi)
- 36:50 — The grahas: five tārā-grahas by brightness (rays vs modern magnitude); Budha = "Pañcama"
- 37:33 — Dhruva-graha: the northern soma-cup; abhicāra to "turn" a king out of power
- 55:58 — *Mahāsalilam* cosmogony: the cosmic egg, primordial waters (salila), onomatopoeic sounds, geography
- 1:01:00 — Moon's nonlinear phases; the five-colour tithi mantra; the 16th kalā; sānāya, daśā, parva
- 1:14:32 — Graha count (108: five tārā + sun/moon/Rāhu + 101 ketus/comets); Rāhu as the eclipse shadow
- 1:30:30 — The Rohiṇī–Soma legend = origin of astrology: Dakṣa's daughters, Soma's curse, "move equally" → equal-sector nakṣatras
- 2:13:54 — Above sun or moon? high/low = the north/Meru direction; the four dvīpas; obliquity

Lecture 8 — Time-measurement in ancient India + *Rainfall in ancient India*

The first ~hour finishes Iyengar's astrology thread and his time-measurement talk; the afternoon ("a very good afternoon to everyone," ~1:01:48) is the *Rainfall in ancient India* talk by R.S. Hariharan, with Iyengar fielding questions.

▸ Session A — Prof. R.N. Iyengar: closing the astrology thread + "How time was measured in ancient India" *(0:05 – ~1:01:48)*

Iyengar first finishes the Rohiṇī–Soma / nakṣatra-karma discussion (a devatā is a fixed "property," not an icon), then gives a self-contained quantitative talk on pre-siddhāntic timekeeping. He traces the day's division into muhūrtas, the problem of measuring the night, and the remarkable solution — Vedic recitation as a chronograph (the bṛhatī-sahasra) and later water-clocks calibrated by reciting a 60-syllable verse — all under the idea that jyotiṣa is kāla-vidhāna-śāstra.

- 0:05 — Closing the astrology thread: devatā = a fixed property (Kṛttikā = agni), not an icon; why properties persist as the equinox shifts
- 11:23 — New talk: "How was time measured in ancient India?" — the quantitative turn
- 17:02 — Ahorātra = 30 muhūrtas (mirroring the 15-day pakṣa); rūpasamṛddhi made quantitative
- 19:39 — The five day-parts (prātaḥ, saṅgava, madhyāhna, aparāhna, sāyam)
- 24:01 — Measuring the night: the Atirātra yajña; Indra "crossing the night" with the chandas (metres)
- 31:57 — The bṛhatī-sahasra (1000 verses = 36,000 syllables) as a chronograph; recitation = timing
- 36:42 — Field recordings of Ṛgvedic recitation speed (Kashi & Mysore); ~3,650 akṣaras/ghaṭikā; the ratio matters
- 43:59 — Siddhāntic units: nimeṣa, prāṇa, guru-akṣara; Āryabhaṭa's 21,600
- 48:09 — Water clocks (nāḍikā/ghaṭikā); the non-linear outflow problem; the dāḍima-puṣpa (logarithmic-weir) shape
- 53:02 — The Līlā-metre verse (60 gurvakṣaras = 1 vighaṭikā ≈ 24 s) for calibration; tested (~23.94 s)
- 57:55 — Marriage gaṭikā-yantra; gaṭikāsthāna inscriptions; recap (Indra, chandas, kāla → jyotiṣa as kāla-vidhāna)

▸ Session B — Dr. R.S. Hariharan: "Rainfall in ancient India" *(~1:01:48 – 2:40)*

R.S. Hariharan argues that ancient India ran a systematic, ~3,000-year-old "monsoon science," not just folk weather-lore — drawing on *Mahāsalilam* (cloud-formation physics), Parāśaratantra (seasonal behaviour, a standardized rain-gauge, a 27-nakṣatra forecast table) and Kauṭilya's *Arthaśāstra* (state rainfall data). He shows, via Iyengar's Current Science papers, that the ancient variability statistics broadly match a century of IMD data for central India.

- 1:01:48 — Folk weather-signs (ants, damp salt) → the claim of a systematic 3,000-year monsoon science
- 1:04:01 — The four sources: *Mahāsalila*, Parāśaratantra, Maitrāyaṇīya Āraṇyaka, Iyengar's Current Science papers
- 1:08:39 — Why it mattered: ~75% of India's water in four months; monsoon failure as civilizational emergency
- 1:13:30 — *Mahāsalila*'s cloud physics: convection + windshear → cumulonimbus; "where wind stops, it rains"
- 1:21:08 — Kālidāsa's Meghadūta verse catches the same physics (smoke, fire, water, wind)
- 1:23:48 — Parāśara's six-month precursor model (winter sets up the monsoon) ≈ the ENSO lag
- 1:26:35 — The defining statement: the southwest wind brings the rain (matches the real monsoon)
- 1:30:07 — The standardized rain-gauge (āḍhaka/droṇa); Kauṭilya's regional rainfall figures as state data
- 1:32:38 — The 27-nakṣatra forecast table read as a probability distribution (drought → bumper years)
- 1:37:52 — Iyengar's test: ancient table vs 1901–2002 IMD data (Indore); CV ≈ 37% matches modern ~31–42%
- 1:53:10 — Multi-year cycles (5/7/18/60-yr); the Venus-visibility omen as an ENSO proxy; Sarasvatī-drought Q&A

Lecture 9 — "Religious astronomy" (Prof. R.N. Iyengar)

Opening with a salute to Vālmīki, Iyengar turns to how Vedic/pre-siddhāntic astronomy underpins everyday Hindu practice. He explains the purāṇic billions-of-years (kāla must start from Sūrya), reframes navagraha worship (a graha is a "holder" of soma/kāla, not a planet to be worshipped), gives the indigenous graha order and the planets' real visibility geometry (Venus's pentagon, Mercury's bow), and closes on comets as disaster-omens in the Mahābhārata and the Sarasvatī's drying. The video ends with Vedic chanting.

- 0:05 — Salute to Vālmīki & the Rāmāyaṇa; framing "religious astronomy"
- 3:17 — Why the purāṇas reach billions of years: kāla must start from Sūrya's "birth"; sanātana = an effectively infinite past
- 5:03 — Maitrāyaṇīya anchor (Sūrya in Maghā ~1800 BC); Sūrya as the door to akāla (para-vidyā)
- 10:14 — Navagraha worship reframed: a graha is a "holder" of soma/kāla, not "planet worship"; Vedic vs tantric vs āgamika
- 11:47 — Where planets appear in the Veda; the lost Kāṭhaka (Kashmir) tradition; the Grahā-brāhmaṇa
- 16:22 — The Vedic graha order: Āditya, then Śukra (foremost, Bhārgava), Bṛhaspati, Budha, Mars, Śani, Chandra, Rāhu, Ketu + Agastya & Dhruva
- 21:05 — The weekday order is foreign-induced; the indigenous order puts Śukra right after Āditya
- 23:43 — Śukra's five-fold (pañcakoṇa/pentagon) visibility; Parāśara's Venus rise/set day-counts (55/65/70/81/90…)
- 30:56 — Budha's bow-shaped (cāpākāra) visibility pattern (plotted by Sunder)
- 32:15 — Aśvalāyana-pariśiṣṭa worship details vs the commercially-sold "yantra" with wrong shapes (sun = circle, Mars = triangle, Rāhu = winnowing-fan, Ketu = flag)
- 35:41 — Graha-utpatti (birth of planets by nakṣatra) → matches the magādi / ~1800 BC equinoctial-full-moon period
- 38:11 — Mahābhārata Rāhu–Ketu: Nīlakaṇṭha's error (Ketu as 180° from Rāhu); comets as the real disaster-indicators
- 43:23 — Comet imagery & disaster (Mausala parva, Skanda Purāṇa): Sarasvatī drying, famine, migration; Kārttikeya/Muruga as a Vedic Agni-form

Lecture 10 — Valedictory session

The closing session — not a lecture but the workshop's valedictory. After Iyengar frames it and introduces the dignitaries, participant feedback (backgrounds spanning physics, Sanskrit, Ayurveda, Himalayan archaeology, UX design, farming, school-teaching and IT), followed by two formal addresses — Prof. Veeranarayana Pandurangi (a Vedānta scholar) on the neglect of Vedic studies, and chief guest Dr. Ganti Murthy (IKS national coordinator) on the division's outreach and the call to carry the paramparā forward. It ends with a formal vote of thanks.

- 0:07 — Iyengar opens the valedictory; an invocation/song by a participant
- 3:20 — Iyengar introduces Dr. Ganti Murthy (IKS national coordinator); on CAHC, the research centre, and the need for young manpower
- 11:04 — Feedback session begins: participants speak one by one
- 15:45 — Iyengar introduces Prof. Veeranarayana Pandurangi (Vedānta scholar, Pūrṇaprajña Research Institute)
- 25:42 — A designer's feedback frames Iyengar's evidence-first, "let-you-decide" approach (a recurring theme)
- 51:05 — Iyengar on why this was a "workshop," not a "course": teaching pre-siddhāntic astronomy through stories
- 1:43:48 — Iyengar on bringing in more experts next time + an assignment to participants (compile a reference list)
- 2:08:56 — Prof. Pandurangi's address: the vastness of the śāstras vs neglected Vedic studies; why arthavāda/stories are essential to reading the Veda; praise for Iyengar
- 2:30:30 — "Iyengar is a history-maker, not a historian"; the punarutthāna (revival) theme
- 2:34:42 — Chief guest Dr. Ganti Murthy's address: IKS outreach (Panchatantra in 10 art-forms/12 languages → 1500 schools; the Mahākāla conference & national astronomical-instrument competition; observational astronomy, rigor; carrying the paramparā forward)
- 2:53:35 — Formal vote of thanks by Dr. R. S. Hariharan: Prof. M. D. Srinivas, Prof. Ganti S. Murthy, Prof. Veeranarayana N. K. Pandurangi, Dr. Chenraj Roychand, Prof. R. N. Iyengar, Dr. Shankar Rajaraman, Sunder Chakravarty, the organising team (Roopa Ramesh, Smitha Bhatta, Vani S, Warija Adiga) and participants; workshop declared concluded