

01

SOS RESEARCH WALKS • 2026

Lake Walk

[VIEW ON KOMOOT →](#)

GATHERING POINT Auditorium (talk room)

THE ROUTE

- 1 Start at Monte Verità, above the town
- 2 Descend west on Via Collinetta to the shoreline
- 3 East along the Via Moscia lakefront
- 4 Through Ascona old town to the harbour
- 5 Climb back up Strada Collina to Monte Verità

2.25 km

DISTANCE

110 m

ELEVATION

Paved roads and a lakeside promenade throughout, with no rough ground and nothing to navigate. The climb back up from the shore comes at the end of the loop.



SCAN FOR ROUTE



WALK LEADS Round 1 Ilyas • Sloan • Foivos • Jacopo Round 2 Xiang • Buse Sen • Rustem Islamov

1 TOPIC

What is optimization's role in the AI era?

- Which traditional optimization questions become less important?
- Where can optimization have its biggest impact over the next 5–10 years?
- What are the biggest gaps between optimization theory and practice, and how do we bridge them?

2 TOPIC

What should be our next optimization theory moonshots?

- Is the classical paradigm — problem class → algorithm → convergence / oracle complexity — still right for modern AI?
- Are worst-case convergence rates still the right target?
- What should theory explain about SGD, Adam, Muon, large-model training, and scaling laws?
- Are quadratics enough as toy objectives, or do we need richer models of neural-network training?

ROUTE Monte Verità → Via Collinetta down to the shore → Via Moscia lakefront → Ascona harbour → back up Strada Collina **2.25 km • 110 m elevation** [komoot →](#)

WALK LEADS **Round 1** Ilyas • Sloan • Foivos • Jacopo **Round 2** Xiang • Buse Sen • Rustem Islamov

Forest Walk

[VIEW ON KOMOOT →](#)

GATHERING POINT Sala Balint (poster room)

THE ROUTE

- 1 Start at Monte Verità and cross the meadow
- 2 West into the pine woods on the upper trail
- 3 Out along the ridge path, roughly level
- 4 Turnaround at the western end of the wood
- 5 Return east on the Sentiero dei Pini

2.35 km

DISTANCE

100 m

ELEVATION

Unpaved woodland trail — roots, stones and uneven footing, so shoes with some grip help. Shaded almost the whole way and quiet enough that conversation carries.



SCAN FOR ROUTE



WALK LEADS Round 1 Florian • Mengmeng • Aurelien • Saeed Round 2 Bingcong • Alain Schöbi • Ehsan Sharifian

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TOPIC

Are we optimizing the right objectives?

Optimization assumes the objective is given — but deciding what should be optimized may be the harder problem.

- If the objective is misspecified, could a stronger optimizer actually be harmful?
- Should objectives themselves be learned?
- Should we train researchers to optimize objectives, or to formulate the right ones?

4

TOPIC

Do we still need to hand-design optimization algorithms in 2030?

- What parts of algorithm design can be automated?
- Can LLMs discover genuinely new optimization algorithms?
- If an AI produces an algorithm that works extremely well but we can't explain why, is that satisfactory?

ROUTE Monte Verità → west into the pine woods → out along the ridge path → back east on the Sentiero dei Pini **2.35 km • 100 m elevation** [komoot →](#)

WALK LEADS **Round 1** Florian • Mengmeng • Aurelien • Saeed **Round 2** Bingcong • Alain Schöbi • Ehsan Sharifian

03

SOS RESEARCH WALKS • 2026

Garden Walk

[VIEW ON KOMOOT →](#)

GATHERING POINT Outside main entrance

THE ROUTE

- 1 Start at Monte Verità and drop to Via Gottardo Madonna
- 2 West along the upper lane, gardens and woods either side
- 3 Open views over the lake most of the way
- 4 Turnaround at the western end above Collinetta
- 5 Return east on Via Collinetta past the villas

2.74 km

DISTANCE

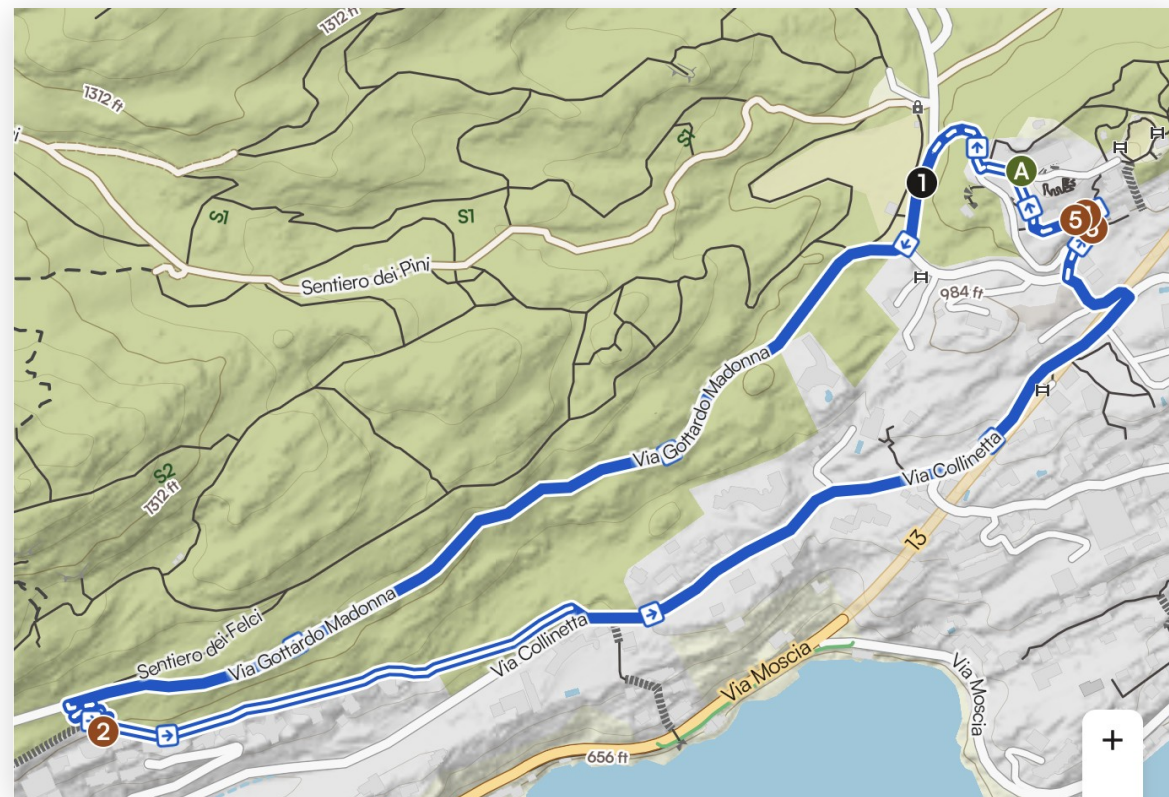
70 m

ELEVATION

Paved hillside lanes throughout, open to the lake for most of the loop, with one modest climb back up to the finish.



SCAN FOR ROUTE



WALK LEADS Round 1 Niao • Daniel • Timur • Yifan Round 2 Chung-En • Zebang • Jakob Nyilöf

5

TOPIC

How will AI change optimization research itself?

AI already reaches into theorem proving, conjecture generation, algorithm discovery and proof verification.

- What should optimization researchers be doing differently now — and in 2030?
- What remains the comparative advantage of a human optimization researcher?
- What skills should we teach the next generation?

6

TOPIC

Is the way we publish, review and evaluate research still serving the field?

- What counts as sufficient novelty when AI can generate proofs, experiments and algorithmic variants?
- How should we evaluate work that leans heavily on AI-assisted discovery?
- How can we raise reviewing quality while cutting workload and review cycles?

ROUTE Monte Verità → down Via Gottardo Madonna → west along the terraced hillside → back east on Via Collinetta **2.74 km • 70 m elevation** [komoot →](#)

WALK LEADS **Round 1** Niao • Daniel • Timur • Yifan **Round 2** Chung-En • Zebang • Jakob Nylöf