

# PRESS KIT

The Eiffel Tower's 130th anniversary exhibition  
*From 28 September to 24 November 2019*



AN INTERACTIVE AND FAMILY EXPERIENCE  
More info on [toureiffel.paris](http://toureiffel.paris)

In partnership with LG and the Caisse d'Epargne in Ile de France



# CONTENTS

Editorial	Page 2
Introduction	Page 3
130th Anniversary Exhibition: Follow the guide!	Page 4
Project Team	Page 9
Sponsors of 130th Anniversary Exhibition	Page 10

## EDITORIAL



*A symbol of ascension, lightness and modernity that has grown into a symbol of Paris and of France, the Eiffel Tower has spanned eras and borders to become the embodiment of French savoir-faire.*

*The celebration of the monument's 130th anniversary is an opportunity for the Société d'Exploitation de la Tour Eiffel (SETE) to set 2019 apart with a variety of events to honor this milestone. Following the festival weekend last March on the 30th and 31st, the day dedicated to youth and the spectacular light show in May 2019, we are pleased and proud to offer visitors of all ages, neighbors, Parisians, French nationals and tourists, a free, immersive exhibition that will take them on a fun and enlightening journey to the era of Eiffel Tower's construction. A sensational way to conclude this wonderful 130th anniversary year. We're betting that it will allow every visitor to rediscover this extraordinary structure that is such an integral part of the collective and universal imagination, in a new way.*

**Patrick Branco Ruivo**

Chief Executive Officer of the Société d'Exploitation de la Tour Eiffel (SETE)

## INTRODUCTION

2 years, 2 months and 5 days... that's how long (a record!) it took to raise in the Parisian skies what would become a national symbol. "A tangible utopia", technological feat, architectural masterwork..., at the close of the 19th century, the Eiffel Tower demonstrated the French genius embodied in Gustave Eiffel, the grand finale of the industrial era.

**The 130th anniversary exhibition** is set up on the Tower's esplanade from September 28th to November 24th, 2019, under a 300 m<sup>2</sup> dome. It tells the story of the inner workings of the Tower's construction, with special focus on the workers that made it happen.

Free of charge and open to all, the exhibition offers a palette of **information diffused on latest generation screens, a variety of experiments and ambient sounds.**

**Scientific innovation and research are a major focus in this astonishing scenography** that shows why the Tower is still so inspiring. And because the Tower also projects into the future, the last part brings into perspective **what the monument still has to offer in terms of contemporary innovation in many domains, including construction.**

## 130TH ANNIVERSARY EXHIBITION: FOLLOW THE GUIDE!

The exhibition hopes to take the public on a **triple adventure**:

**A voyage through time** — you'll be transported to the years 1887 - 1889, when the Tower was under construction — **meeting the men** who built the Eiffel Tower, and finally, **an interactive experience** that opens up a lot of room for immersion.

The exhibition leads visitors along four main axes: **“Origins of the Tower”**, **“Conquest of the Skies”**, **“A Universal Monument”** and **“The Tower’s Evolution”**.

### ○ The competition

We start our journey 130 years in the past, at the time of the 1889 World’s Fair. At that time, a huge competition was launched in the Official Journal: *“Analyze the possibility of raising on the Champ-de-Mars a square-based, metal tower 125 m [410 feet] on each side and 300 m high [984 feet].”* **This section presents some of the projects that stood out** among the 107 that were submitted. And if the Eiffel Tower hadn’t been selected?!



On a tactile screen, visitors **can play at replacing the Iron Lady with over a dozen other emblematic monuments** including the Arc de Triomphe, the Taj Mahal, the Empire State Building, the Burj Khalifa or even the Great Pyramid of Giza.

### ○ The battle of words

Even before its construction, everyone had an opinion about the Eiffel Tower. The Tower didn’t immediately win over public opinion, nor the favor of artists like composer, Charles Gounod and writers, Guy de Maupassant and Alexandre Dumas fils. The fashionable Parisian architect, Charles Garnier, also launched his outcry against *“this intruder, as monstrous as it is ugly, in the Parisian sky”*. But others supported Gustave Eiffel. Among them, Edouard Lockroy, Minister of Commerce and Industry. When construction began on the Tower, it was already famous.



*“Lonely suppository riddled with holes”, “Giant, without beauty or style”, “Tour of Babel”, “Insane pyramid”, “Ridiculous mast”, “Industry’s Arc de Triomphe”*... These are some of the insults and audio messages you’ll hear as you enter the exhibition. Like diving (back) into the era of heated debate!

## Conquest of the Skies: A masterwork of engineering and technology

In addition to being a masterpiece of engineering, **the Tower was also a tremendous human and collective adventure.** This section spotlights **the genius of four men** who played decisive roles in the structure's design. It also focuses on the some of the **technical particularities.**

### ○ Four men to imagine it

Maurice Koechlin, engineer, joined the Eiffel company as its chief design engineer. He's the one who suggested creating a metal tower. Eiffel gave another engineer, Emile Nouguier, responsibility for directing the technical studies and assembly. He produced the first drawing in 1884. Finally, the architect they partnered with, Stephen Sauvestre, drew the Tower as we know it today.

### ○ Wind resistance

From the moment they see it, visitors are struck by the tower's unique shape. It's flared triangular structure and its intricate organization of puddle iron beams gives it a singular look and an incredible stability to withstand wind.



### Resisting wind and sun

By blowing on another screen, visitors can experiment with the Tower's **resistance.** This activity helps to understand how the wind has only a slight impact on the monument, unlike the sun. In fact, on a bright, sunny day, the Iron Lady can lean up to 18 centimeters!

### ○ A puddle iron Tower

Spotlight on **puddle iron, the construction material favored by Eiffel,** for its **rigidity, solidity** and **durability,** which enables it to resist against vibrations, traction and flexion. Puddle iron is in fact **10 times more resistant than wood** and **20 times more solid than stone.**

The building site was gigantic: **2,500,000 rivets** were put in place to hold together **18,038 pieces of metal.** It took a team of four workers to place each rivet. These teams were able to put in around **one hundred rivets** per day!

### ○ Record assembly time

Shipped from Pompey in Lorraine, the metal elements were assembled in Levallois-Perret, at the Eiffel factory near Paris, then taken to the Champ-de-Mars. The foundations only took 5 months to complete, and 21 months later, the structure was already assembled.

Mounting the four pillars, in cantilever, was a delicate phase. A temporary, central pillar had to be built in order to assemble the 1st floor platform. **On March 31st, 1889, the construction was completed in a record time of 2 years, 2 months and 5 days.**

### **A spectacular work!**

Young visitors can advance carefully along a beam overhanging a screen that lies on the floor. They feel like **they're walking out into empty space**, just like the workers experienced while building this extraordinary structure!

#### ○ **A human adventure**

The Iron Lady's construction was also a **tremendous human and collective adventure**: 1,500 workers from the Fould Dupont factory in Pompey made the Eiffel Tower's beams. Between 150 and 300 workers did the labor of mounting this gigantic erector set. Teams of 4 workers-riveters per workstation assembled the 18,038 beams with 2,500,000 rivets. This section of the exhibition presents **the different trades these men exercised** like carpenters, riveters, blacksmiths....

#### ○ **The Eiffel Tower elevators**

The Eiffel Tower construction site was an opportunity for some amazing innovations. Naturally, the *130th Anniversary Exhibition* dedicates a section to the elevators, one of the monument's key features. They began operating in 1889, and were a huge innovation for that era. Thanks to these machines, you could observe the city from above for the first time. **Exhibition visitors can watch an excerpt from the first travelling realized by the Lumière brothers in one of the elevators.**

#### ○ **Originally the Eiffel Tower was red**

It's the paint that ensures this metallic structure's preservation. **It's a fundamental part of maintenance on the tower, the element that allows for its longevity.** The current color is a brown specific to the Eiffel Tower, with three different nuances, the lightest one used at the summit. A first layer of protective paint was applied as the Tower was built. It was then covered with two layers of linseed oil before it's inauguration in March 1889, and two months later, a fourth and last coat of red.

## **The Eiffel Tower, a universal monument**

Among the themes discussed, it would be impossible not to talk about the Tower's **importance and what it represents**. When it opened, close to 2 million visitors came to see it, almost 12,000 per day!

A monumental symbol of progress, it incarnates **technical innovation, progress, and radiates France's image around the world**. It's fame was immediate. It welcomed illustrious visitors like King George I<sup>st</sup> of Greece, the actress Sarah Bernhardt, Buffalo Bill, the inventor of the phonograph, Thomas Edison, and many others.

## **The Tower's Evolution: Adaptations & innovations**

#### ○ **The Communicating Tower, 1898 to 2019**

In 1903, Gustave Eiffel was looking for a way to save *his* Tower because the City of Paris' concession would end six years later. He contacted Captain Férrié, who at the time was in charge of studying the military applications of the TSF (wireless telegraph), suggesting he use the monument for his

experiments. The Tower quickly became a strategic military observation post and the City of Paris renewed its concession. **Today, the Tower is an important means of communication for solemn tributes and joyous celebrations.**

### ○ **Enrobed in light**

When it opened in 1889, hundred of gaslights illuminated the Tower. Since 2000, the 20,000 lightbulbs that decorate the structure twinkle for the first five minutes of every hour from nightfall until one in the morning.



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From special illuminations to the spectacular fireworks shows put on at the Tower, film excerpts revisit the **exceptional light shows that have illuminated** the monument. Immediately recognizable, they have conquered such a huge place in the collective imagination that they now symbolize Paris and France throughout

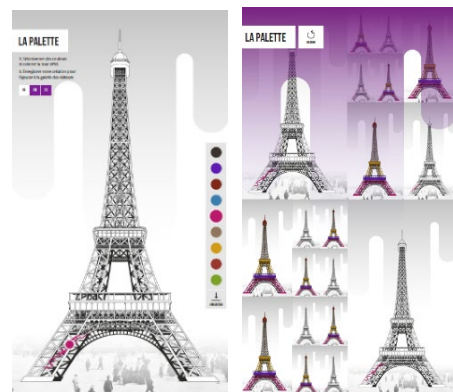
### ○ **Caution, wet paint!**

*“We cannot reiterate enough the principle that paint is the essential element in conserving metal works, and the attention given to it is the only guarantee of the work’s longevity.”* Gustave Eiffel.

The tower has sported **seven different colors** since its original Venice red: reddish-brown, brown ochre, a variation of 5 shades of yellow over its total height, yellow-brown, brownish-red, and since 1968, an “Eiffel Tower brown” with three difference nuances. In 2019, the Tower will undergo its **20th** paint-renewal mission. This exceptional work is truly a technical and human feat.

### **Repaint the Tower!**

Purple, blue, yellow or green, visitors are free to let their imagination run wild while repainting the Tower with the palette of colors available on a tactile screen.



### ○ **The Eiffel Tower and its surroundings: Towards 2024!**

The site that stretches from the Tower to Trocadéro and the Ecole Militaire, then from the quai Branly Museum to Bir-Hakeim will be re-landscaped from now until 2024. During the Olympic games, 15,000 athletes from around the world will gather in Paris. Visitors can already get a glimpse of the project by watching a film produced by the London landscape architecture studio Gustafson



Porter+Bowman, who won the international competition for this space organized by the City of Paris. Their concept is to **implant fields of green that surround the Tower**.

○ **The Tower as a space for innovation**

Its revolutionary height and shape were made possible by a material that is flexible, light, and easy to assemble: **beginning with its conception the Tower has always been linked to innovation**. 3D concrete, Earth homes... And if Gustave Eiffel were still alive, what new challenges would he tackle? **These are some of the ideas visitors are given to ponder in the last section**, showing that the Tower also projects itself into the future.



© Karine Sicard Bouvatier

**A beautiful publication for the monument's 130th anniversary**

*Available in bookstores starting on October 10th, 2019*

**La Tour Eiffel – Monument Intemporel**

**By Benjamin Peyrel**

**Published by Editions de La Martinière**

On the occasion of the Eiffel Tower's 130th anniversary, La Martinière is publishing a resolutely modern and richly illustrated book that puts images of yesterday and today side by side to elucidate the Iron Lady's technical challenges and international influence.

**Benjamin Peyrel** is a journalist and author. He works extensively for *L'Express*, where he follows events in the French regions and elaborates full reports on issues including major French cities, heritage, urban and territory planning. He is the author of *Altarea-Cogedim* from Editions de La Martinière.

**Practical information for the 130th Anniversary Exhibition:**

**From September 28th to November 24th, 2019**

**On the esplanade in front of the Eiffel Tower**

**Hours: from 10 AM to 8 PM**

**The exhibition is free of charge and open to all.**

**EIFFEL TOWER PRACTICAL INFORMATION**

*The Eiffel Tower is open every day from 9:30am to 11:45pm.*

**Online purchases can be made 60 days before a visit and up to 3 hours before.**

**WHAT'S NEW?**

**Audio tours are available on the Eiffel Tower's WiFi platform as of September 27.** Find all the practical information: services, map, stores and food, as well as cultural and historic information. Available in French, English and Spanish.

**Waiting times at the security checkpoints and ticket windows is now available on the Eiffel Tower website in real time, under the heading "Planning a smooth visit".**

## PROJECT TEAM

### **Exhibition production:**

Société d'Exploitation de la Tour Eiffel (SETE)  
Mission 130 years of the Eiffel Tower

### **Production and scenography:**

Museum Manufactory - Atelier FCS

Multimedia :

Anamnesia (Paris - Strasbourg)

### **Scientific curator:**

Odile Lassère, Heritage Curator, Director of the Iron History Museum, Metropolitan area Grand Nancy

### **Innovation:**

Benoît Roman (CNRS Director of Research) and Etienne Guyon (former Director of the Ecole Normale Supérieure) PMMH Laboratory (CNRS, ESPCI PSL University, Sorbonne University, University of Paris).

Thanks to Corrado Maurini, Professor at Sorbonne University, IJLRd'A Laboratory (Innovation).

### **Photo credits:**

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## 130TH ANNIVERSARY EXHIBITION: THE SPONSORS



LG Electronics France was created in 1991 and is a subsidiary of the Korean multinational LG Electronics, Inc. This latter is a world leader and innovator in consumer electronics technologies and electrical appliances, employing 77,000 people in 125 different countries around the world.

LG is one of the largest manufacturers of flat screen TVs, air conditioners, washers and refrigerators. LG products are designed for discerning and sensitive consumers - people who are ready to take on new activities and set new personal challenges to broaden their experiences and make their lives better.

LG has continually and progressively developed its brand image in order to share its motto "Life's Good". LG works hard to marry contemporary with authentic, and never ceases to evolve and adapt to modern ideals.

LG's philosophy is based on respect for individuals, sincerity, and getting back to the basics. LG is committed to serving its customers by offering them solutions that meet their needs and by constantly innovating ways for them to increase well-being in their daily lives.

LG Electronics is responsible for pioneering innovations in the TV industry, creating avant-garde technologies like OLED TVs.

OLED (Organic Light-Emitting Diode) is a technology used in televisions to produce images on the screen. When there is an electrical contact, each diode can light up individually and produce a vast array of colors. When there is no electrical charge, the diodes switch off completely. Some diodes can be deactivated while others continue to work. An OLED TV can offer the experience of profound blacks as well as rich, bright colors. In parallel, this technology respects the environment by consuming less energy.

LG Electronics also created an intuitive operating system that lets users take full advantage of Smart TV technology.

LG is constantly working to improving life for its customers by offering innovative home entertainment products like award-winning OLED 4K TVs, as well as ULTRA HD and WebOS TVs.

At the 130th Anniversary Exhibition, visitors will have the chance to discover some of the LG products that boast the latest technological advances which make the brand a first-line leader. Visitors to the exhibition will discover some of the diverse screen technologies that are LG's flagship products. OLED, UHD, and Full HD screens, in addition to an Ultra Stretch, atypical 58:9 format screen, or again the tactile screen that can be used throughout the exhibit for an unprecedented interactive experience.



## **BETTING ON THE FUTURE**

**For over 200 years, the Ile-de-France Caisse d'Epargne has accompanied French society in its transformations. It has stood the test of time, always present as the bank that was useful to its clients.**

### **Serving individuals**

In the 430 branch offices scattered across the 8 Ile-de-France departments, our advisors put their know-how to work for individuals, professionals, wealth management and private banking clients. You Are Useful, is the motto each of our advisors tries to live up to every day by continually listening to our clients in order to provide them with the best advice and services. The Caisse d'Epargne also provides all the mobile banking services to offer the best human and digital experience.

### **Serving the region**

Grand Paris's bank, the Caisse d'Epargne is an essential partner for the region's economical decision makers in terms of space planning, equipment and infrastructures, during this period of rapid development in Ile-de-France. It is the top ranked bank for social housing and also tops the list for financing collective administrations. It is also a leading actor in professional real estate, financing transportation and planning projects and accompanying businesses.

### **A bank - patron**

Awarded the title of Grand Patron of Culture by the Ministry of Culture, the Ile-de-France Caisse d'Epargne accompanies more than forty general interest projects per year in accordance with its two priority issues: access to culture for everyone, especially young people, and the fight against all forms of exclusion

### **Looking toward the 2024 Olympic Games**

The fact that Paris will host the 2024 Olympic Games is another huge opportunity to boost development throughout the region. The Ile-de-France Caisse d'Epargne has several qualities that make it stand out from the rest: excellent knowledge of the terrain, and the competence and experience needed to finance any type of project.