$E=MC\ ^2$  is the eleventh studio album by American singer and songwriter Mariah Carey . It was released in the United States on April 15 , 2008 by Island Records . The singer began recording the album in 2007 in Anguilla , after writing and composing most of its material during and after her 2006 Adventures of Mimi Tour . Carey worked with several notable songwriters and producers during the course of the project , including Jermaine Dupri , Bryan @-@ Michael Cox , Stargate , The @-@ Dream , Tricky Stewart , Scott Storch and Danja .

The album revealed a more personal side of the singer , illustrated in its declarative theme of emancipation from her previous marriage , and from her personal and professional setbacks . Although it shared similar vocal production as well as an inclination to her signature pop and R & B ballads , the album also encompassed a variety of dance @-@ oriented and uptempo styles . It was meant to be a continuation , or a second part of her tenth studio album , The Emancipation of Mimi ( 2005 ) . Carey collaborated with a number of artists on the album , including T @-@ Pain , Damian Marley and Young Jeezy . Though considered by critics very similar to the formula its predecessor had been built on ,  $E = MC\ ^2$  included other genres she had never explored , such as reggae , and her continued recording of gospel @-@ influenced hymns .

 $E=MC^2$  was generally well received by music critics , with many complimenting the record 's broad genre influences , and musical and production styles . Some critics , however , felt that the album was too similar to The Emancipation of Mimi , and didn 't offer anything new from the formula . The album debuted at number one on the US Billboard 200 with opening week sales of 463 @,@ 000 copies ; the highest first @-@ week sales of Carey 's career . It opened inside the top @-@ five on the albums chart in Australia , Canada , Switzerland and the United Kingdom . The album achieved worldwide sales of over 2 @.@ 5 million copies .

Four singles were commission in promotion of the album . The album 's lead single , " Touch My Body " , became Carey 's eighteenth chart topper on the Billboard Hot 100 , making her the solo artist with the most number one singles in United States history , surpassing the record held by Elvis Presley . Additionally , it gave Carey her 79th week atop the chart , tying Presley for most weeks at number one . It achieved strong worldwide charting , peaking within the top five of the singles charts in Italy , Japan , New Zealand , Switzerland and the United Kingdom . " Bye Bye " served as the album 's second release . Although hailed by critics , and expected to have achieved large commercial success , the song stalled at number nineteen on the Hot 100 , and managed to chart weakly internationally . Both the third and fourth singles , " I 'll Be Lovin ' U Long Time " and " I Stay in Love " failed to garner success in any prominent music market .

# = = Background and recording = =

In 2005, Carey signed a new record deal with Island Records and released her tenth studio album, The Emancipation of Mimi. It became the best @-@ selling album of 2005 the United States, and the second best @-@ seller around the world, with over 12 million units sold. It earned a myriad of music industry awards, and brought Carey back to the top of pop music following her commercial decline in 2001. After completing The Adventures of Mimi Tour, she began working on material for her eleventh studio effort, the yet untitled E = MC 2. E = MC 2 was hailed as one of the most anticipated albums of 2008, with many critics weighing their opinions on whether Carey would be able to deliver significant success, following her achievements with The Emancipation of Mimi. Carey began writing and producing the music she saw fit, and not anything to please record executives. Throughout 2007, Carey recorded the album in a studio built into her private villa in Anguilla, in the Caribbean. She describe E = MC <sup>2</sup> as one of her most expressive albums, and one that she felt free on, and able to express herself through her music. In an interview with The Bryan Times, Carey spoke of her sentiments on the album "It 's hard for me to sit here and talk about it without sounding like if I 'm bragging if I 'm in love with it, but I am I love with this album. I think that having the success with the last record allowed me to have more freedom ... and just make records that I like . Its kind of a really fun record .

The album was supposed to be released in late 2007, but Carey spoke about reason the album got delayed: "You can 't really put records out in December if you want the whole world to have a chance to actually hear it, [ and ] my fans all over the world are very important to me ", adding that she also wants to put out a pair of singles before the album drops. In a separate interview, she elaborated further: "This happened to me with The Emancipation of Mimi, I started writing more songs, I was like okay let me get these done, then I wrote four more songs and you know how it goes, so now I 'm like 22 songs in and clearly I have to cut some of those down ". It was then reported that the album will be released in February 2008. However, the release was later pushed back yet again to April 2008.

Prior to the its release , the album 's working title had been That Chick , taken from a song on the album with a similar name , " I 'm That Chick " . As the release date drew near , the title was changed to E = MC  $^2$  , in reference to Carey 's previous album , The Emancipation of Mimi ( 2005 ) . The title signifies " ( E ) Emancipation ( = ) of ( MC ) Mariah Carey (  $^2$  ) to the second power " . It is a word play on Albert Einstein 's famous mass ? energy equivalence formula and has been dubbed as the sequel and improved counterpart to The Emancipation of Mimi . In his review of the album , Alex Macpherson from The Guardian described his thoughts on its title , as well as its meaning :

It is worth pondering what the title of Mariah Carey 's eleventh studio album could refer to . Emancipation , maybe , in a nod to her 2005 comeback album , The Emancipation of Mimi ; or perhaps the energy of the original equation , a statement that Carey still has what it takes to party all night at the age of 37 , even as she describes herself as " eternally 12 " . Then again , she could just be identifying herself alongside Einstein as a fellow genius . Either way , '  $E = MC\ ^2$  ' finds Carey loopier than ever , embracing her own larger @-@ than @-@ life image with gusto : Mariah Carey Squared indeed .

Carey expressed how she considered Mimi the " main course " , and felt that the new album would be treated as " dessert " . In an interview with NME , the singer described her choice on the album 's title : " Basically , I 'm freer on this album than I 've ever been . Some of the songs on the last album were cool but maybe not quite as neat as this album . " When questioned if the title represented Carey 's interest in physics , she jokingly added " Einstein 's theory ? Physics ? Me ? Hello ! I even failed remedial math . I could not pass seventh grade math even in the lowest class with the worst kids . " The album 's similarity to its predecessor is not only found in the title and music , but also in its artwork . In the album 's cover art , she holds almost the exact pose as from her last album , only with different lighting and wardrobe . It features a black backdrop , with Carey completely naked , except for a large feathered shawl covering her body . Only her first name appears in large pink letters on the cover , with ' E = MC  $^2$  ' appearing in small white letters on the top . In describing the cover , Macpherson wrote " Carey is naked but for the world 's largest feather boa , an accessory for which flocks of birds have surely given their lives . "

= = Composition = =

= = = Style and structure = = =

Music critics compared E = MC  $^2$  heavily to Carey 's previous album , The Emancipation of Mimi , and felt it followed the same formula of ballads and dance @-@ able tracks . Freedom De Luc of The Washington Post felt that after experiencing strong success for the first time in the 2000s with Mimi , Carey tried to create E = MC  $^2$  with the same formula , although possibly a little improved : " Having found that winning formula of coquettish club bangers , emotional ballads and frisky , mid @-@ tempo coos , the diva with the golden tone has eschewed radical experimentalism here for stasis . ' E = MC  $^2$  ' is mostly more of the same , then , with the ' 2' representing something sequential rather than exponential . Meet the new Mariah , almost exactly the same as the old . . . '

### = = = Songs and lyrics = = =

The first song on the album 's track @-@ list is " Migrate " , a song Carey wrote and co @-@ produced alongside Danja , and featuring a rap verse from T @-@ Pain . Its melody is built on a heavy electronic beat , and incorporates whistle registers and several studio @-@ created synthesizers into its melody . Additionally , the song features the inclusion of Auto @-@ Tune and several vocal manipulators , which are used heavily on both Carey and T @-@ Pain 's vocals . Lyrically , the song finds the singer during a night out , migrating from several locations : from the car to the club , from the bar to the V.I.P , from the party to the after @-@ party , and finally to the hotel . According to Brian Hiatt from VH1 , she " hops from my car into the club ... from the bar to VIP ... from the party to the afterparty ... afterparty to hotel " with T @-@ Pain , who urges her to " bounce , bounce , bounce , bounce ."

The album 's lead single , " Touch My Body " , was written and produced by Carey , Tricky Stewart and Terius " The Dream " Nash . The song 's hook is built around a piano melody and " circular keyboard line " , and features " a stuttering mid @-@ tempo beat that 's accented by finger snaps and electronic synthesizers " as its instrumentation . Lyrically , the song describes the protagonist revealing several bedroom fantasies in which she would like to engage in , asking her lover playfully to " touch her body " . According to Ben Ratliff from The New York Times , it 's a " questionably sexy striptease : a goofy @-@ sleazy tryst vignette " , with Carey singing " If there 's a camera up in here then I best not catch this flick on YouTube . "

"Cruise Control", featuring reggae artist Damian Marley, is influenced by R & B and Reggae, and finds her adapting to the genre by imitating Jamaican phrases, accents and styles of singing. " I Stay in Love " was released as the fourth and final single from the album, and places fourth on its track @-@ listing . Written by Carey and Bryan @-@ Michael Cox , is a mid @-@ tempo " beat @-@ driven " and " piano @-@ laced " ballad , that is influenced by pop and R & B music genres . The song 's instrumentation is derived from a piano melody, and is backed by a strong computerized drum @-@ beat . Its lyrics find Carey as her most vulnerable; she describes old times she shared with her lover, and that even though "we said let go", and "inside she knows its over" , she still " stays in love with him " . Featuring American rapper Young Jeezy , " Side Effects " describes Carey 's abusive relationship with Tommy Mottola, her ex @-@ husband. During the first verse, she discusses the pair 's background, and how she was young and naive, and believed everything he preached to her . The lyrics read " Keepin ' me there , under your thumb / Cause you were scared that I 'd become much / More than you could handle , " she confesses , and refers to herself as "Shining like a chandelier / That decorated every room inside / The private hell we built / And I dealt with it / Like a kid I wished / I could fly away . " According to Freedom De Luc of The Washington Post , on the song Carey uploads on Mottola , " ' sleeping with the enemy , aware that he was smothering every last part of me . ' She finally walked away , she sings , ' but I still live with the side effects . ' Sarah Rodman from The Boston Globe described it as " another look at her fractious marriage to Mottola ", and wrote " Although the union ended in 1998, Carey is still suffering, including dreams of the 'violent times' and 'sleeping with the enemy'. Interestingly, her vocal approach here is almost emo, as she hits her rock @-@ solid middle register and refuses to be held captive by the demons of her past . " MTV News writer Jennifer Vineyard described the song in detail:

[ It ] finally reveals a side of Mariah we don 't see that often? her true self . The Mariah we usually see and hear is a glossy one . Psychologists might say her affect is ' off '? meaning her gestures and facial expressions don 't match her mood . There 's a reason for that , as she explains on ' Side Effects ', which is the emotional abuse she says she suffered during her marriage to music mogul Tommy Mottola . Mariah , who is usually quite guarded , has alluded to the subject in songs like ' Petals ', but never has she gone into such detail as she does on ' Side Effects ', in which she refers to the marriage as a ' private hell that we built ' . Even though it 's been 11 years since they split up , she sings in a lower register that she 's still ' wakin ' up scared some nights ... dreaming about the

violent times '. Her emotional scars left her 'a little protective ... a little defensive ... a little depressed ', which makes her 'fake a smile 'as she 'deal [s] with the side effects '. Even though it features Young Jeezy, it sounds like a rock power ballad.

" I 'm That Chick " is a song Carey wrote alongside Norwegian duo, Stargate. Its a fast @-@ paced song, which features a "care @-@ free feel ", and is influenced by soul, pop and disco music genres. The song incorporates a sample from Michael Jackson 's " Off the Wall ", and features a strong thumping bass @-@ line and hand claps . Evan Sawdey of PopMatters described it as a " late @-@ night disco @-@ bass groove ", and highlighted its production as the album 's finest . " I 'II Be Lovin ' U Long Time ", the albums ' eventual third single, was written and produced by Carey and DJ Toomp . The song was described as a " mid @-@ tempo " , " party jam " , that is influenced by pop, R & B and soul music genres. Critics elaborated on the song 's " soul " influence , with Melissa Ruggieri from The News & Advance described it as a " soul @-@ thumper " , while Digital Spy 's Nick Levine called it a " nod towards classic soul ". The song 's title is derived from the popular line, " me love you long time ", from the 1987 war film, Full Metal Jacket. Additionally, its hook and instrumentation is derived from sampling Mark DeBarge 's Stay With Me . Critics also noted how " I 'll Be Lovin ' U Long Time " " recalls " the melody riff and chord progression of the Hill Street Blues 's theme song . The song 's main source of production comes from its " lush keyboard work ", and her usage of the "double voice ", which she uses throughout the song 's bridge. Carey described the effect as " layering her voice ", so that the bridge would sound like a " swooning bank of a hundred Mariahs ".

" Bye Bye " served as the album 's thirteenth track, and also composed by Carey and Stargate. An " inspirational power ballad ", it is influenced by R & B and pop music genres. The song is built on an understated and simple piano @-@ driven melody, that is decorated with a soft bass @-@ line. Lyrically, the song was described by critics as a "larger than life anthem", and an "inspirational lighter @-@ in @-@ the @-@ air ballad ", and finds Carey remembering both her father, as well as any lost loved ones. While the verses are dedicated to him, the chorus was written in a third @-@ person point of view , for her fans : " This is for my peoples who just lost somebody / Your best friend, your baby, your man or your lady / Put your hand way up high / We will never say bye / Mamas, daddies, sisters, brothers, friends and cousins / This is for my peoples who lost their grandmothers / Lift your hands to the sky / Because we won 't ever say bye bye " . While listing several forms of loss, Carey encourages to never let go, and always live with their memory, and put their hands if they ever lost someone, ' cause we won 't ever say bye bye ' . Serving as the album 's closing number, " I Wish You Well " was compared to the closing number on Mimi, " Fly Like a Bird " . Similarly , " I Wish You Well " incorporates gospel influence into its melody of " rousing piano waltz ", that " extends forgiveness to those who have wronged her in the past and is pretty much interchangeable with its predecessors . " Extensively making use of the whistle register , she references Mottola in another light than " Side Effects ": " ' I Wish You Well 's ' message to Mottola is similarly striking. Accompanied by a piano and some multi @-@ tracked backing vocals, Carey sings: "Still bruised, still walk on eggshells / Same frightened child, hide to protect myself / But you can 't manipulate me like before . " She then prescribes Bible study and says , " I wish you well .

## = = Critical reception = =

 $E = MC^2$  received a 63 / 100 ( indicating " generally positive reviews " ) on the website Metacritic , which averages professional reviews into a numerical score . Stephen Thomas Erlewine , senior editor of Allmusic , rated the album three out of five stars , and wrote " it 's misleading to judge Mariah based on her new record of possessing the most number one singles , as she 's not about longevity , she 's about being permanently transient , a characteristic '  $E = MC^2$  ' captures all too well . " Billboard 's Gary Trust felt that on the album , Carey was in " pristine form " , stating , " She 's proclaimed emancipation before , but Mariah Carey 's never sounded as free as she does on her 10th album . Carey 's made a pop album with equal parts levity and gravity . " Writing fir Entertainment Weekly , Margeaux Watson graded  $E = MC^2$  an ' A-' , and described how the album

's goal was to prove "her comeback was no fluke ". She continued complimenting the album 's several collaborations , and wrote "the result is a largely enjoyable mix of flirtatious club jams , midtempo love songs , and emotional ballads anchored by hip @-@ hop beats that handsomely showcase the singer 's powerful vocal chops . "Though Carey 's voice had been criticized since her 2002 release , Charmbracelet , for not being able to deliver the "gravity defying vocals "from the 1990s , Roger Friedman from Fox News wrote "Her infamous eight @-@ octave range has suffered a little wear and tear over the years , but Carey still can flutter from great highs to mellow lows like no one else . "Alex Macpherson from The Guardian gave the album four out of five stars , heavily describing the singer 's vocal state throughout the album : "Carey 's voice has been mocked , bizarrely , as being a triumph of technique over soul - an argument that fails to comprehend that technique and soul are intertwined , that technique primarily exists as a means to convey emotion but she is on fine vocal form throughout 'E = MC  $^2$ ', whether belting out massive ballads , or layering her voice into a swooning bank of a hundred Mariahs . "Macpherson concluded his review with , "When she sings elsewhere , "Them other regularities , they can 't compare with MC , " " it is hard not to agree ", referencing a lyric on " For the Record " .

The Houston Chronicle 's Joey Guerra felt all of the album 's tracks were strong, and wrote " Every track plays like a potential hit single, and that 's exactly what fans will love about 'E = MC 2'. Expect it to soundtrack much of the summer and beyond . " Los Angeles Times staff writer , Richard Cromelin, gave the album two out of four stars, noting its alternatives to the glass @-@ shattering flamboyance of her early '90s youth . " He concluded in his mixed review of the album , " Of course , consistency isn't so important when an album is assembled as a series of singles rather than a cohesive work. Fortunately for Carey, the tabloid @-@ tailored real @-@ life back story on one side and the producer 's craft on the other matter more than the art of singing in this particular fairy tale. "Ben Ratliff of The New York Times felt the album didn't level up to par with Carey's previous release, writing " Much of the record sounds like urban @-@ radio imitations, without the peculiarities and effective hooks of 'Mimi'. Maybe emancipation isn't a continuing procedure: maybe it only comes once . " Writing for PopMatters , Evan Sawdey rated  $E = MC^2$  four out of ten discs, describing it as a "shallow imitation of its predecessor". Sawdey concluded his review on a mixed note, stating "the second act of Mariah's comeback doesn't wisely expand her sound: it instead succumbs to the blueprint so carefully laid out by its predecessor, a pointless remake that exists only because it has to . If you ever had a doubt as to its formulaic nature , you need to look no further than its title. Long live the Diva. " Caryn Ganz from Rolling Stone questioned why she limited her vocal abilities throughout the record, " nearly every song confines Carey to four @-@ note verses, offering little room for her glorious range. " Journalist Eric Henderson, writing for Slant Magazine, graded the album three out of five stars, and concluding with, " Such are the rewards of an album like 'E = MC2', in which one does reach a solution, but not before Mariah bends over backward to show her work . " The album finished in the top @-@ ten of several " best of 2008 " lists , ending at number four on an official poll held by Billboard , eight by The Detroit News , and number ten by The San Diego Union @-@ Tribune. Robert Christgau picked out one song from the album, "Touch My Body", as a "choice cut"().

### = = Commercial performance = =

 $E=MC\ ^2$  debuted at number one on the Billboard 200 with 463 @,@ 000 copies sold , making it the biggest opening week sales of Carey 's career , and also the biggest opening album in 2008 for a female artist , before matched by Taylor Swift 's Fearless in November . With six number one albums , Carey is now tied with Britney Spears and Janet Jackson and Beyoncé in the United States for the third most number one albums for a female artist , behind Madonna with eight and Barbra Streisand 's nine chart toppers . In its second week , the album remained at number one on the albums chart , with 182 @,@ 000 copies sold .  $E=MC\ ^2$  became Carey 's first album to spend two straight weeks at number one since 1995 's Daydream , although The Emancipation of Mimi ( 2005 ) spent two non @-@ consecutive weeks at the top spot . On Billboard 's Top R & B / Hip @-@ Hop Albums chart ,  $E=MC\ ^2$  debuted at number one , and spent forty @-@ seven weeks fluctuating

within the top 100 . The album was certified Platinum by the Recording Industry Association of America ( RIAA ) on July 8 , 2008 , denoting shipments of one million units . According to Nielsen SoundScan , stateside sales of the album stand at 1 @,@ 289 @,@ 000 copies as of April 2013 . In total , E = MC  $^2$  spent twenty @-@ seven weeks within the Billboard 200 , and finished at number twenty @-@ two on the Year @-@ End chart . On the same day the album was released , Mayor Antonio Villaraigosa proclaimed April 15 officially as " Mariah Carey day " in Los Angeles . It was in part of celebrating her eighteenth number one single , " Touch My Body " . Also , from April 25 through April 27 , 2008 , the Empire State Building was lit up in Carey 's motif colors ? lavender , pink , and white ? in celebration of her achievements in the world of music . On the Canadian Albums Chart , during the week dated May 3 , 2008 , E = MC  $^2$  debuted at number one , with first @-@ week sales of 19 @,@ 000 copies . It became her first number one album in Canada since before 1999 , as Rainbow and The Emancipation of Mimi both opened at number two . The album spent seven weeks within the album 's chart , and was eventually certified Platinum by the Canadian Recording Industry Association ( CRIA ) , denoting shipments of 100 @,@ 000 units .

E = MC <sup>2</sup> entered the Australian Albums Chart on April 5, 2008, at number two. The album spent eight weeks in the albums chart, and was certified Gold by the Australian Recording Industry Association (ARIA), denoting shipments of 35 @,@ 000 units. In France, the album debuted at its peak position of number six during the week dated April 19, 2008. E = MC <sup>2</sup> spent twenty weeks on the albums chart, and ended its run on August 30, 2008. On the Dutch Albums Chart, it debuted at its peak position of number eleven on April 19, 2008. The album ended its eight @-@ week chart run on June 7, 2008. During the week dated April 28, 2008, E = MC <sup>2</sup> debuted at number ten on the New Zealand Albums Chart, starting a ten @-@ week run on the chart. The album peaked within the top ten in several European countries, such as number five in Switzerland , seven in Germany and Ireland, eight in Austria and number nine in Italy. On the UK Albums Chart , the album debuted at number three , selling 34 @,@ 800 copies . This was her highest peak position in the United Kingdom since Butterfly (1997), which peaked at number two. After thirteen weeks on the chart, the album was certified Gold by the British Phonographic Industry (BPI), denoting shipments of 100 @,@ 000 copies. In Japan, the album peaked at number seven on the Oricon Overall Chart, and was certified Gold by the Recording Industry Association of Japan (RIAJ ) for shipments of 100 @,@ 000 copies. After only eight days of release, E = MC <sup>2</sup> was certified Gold in the Philippines, denoting shipments of 15 @,@ 000 units. The album was the 26th best @-@ selling album worldwide in 2008, according to International Federation of the Phonographic Industry (IFPI). As of September 19, 2009, the album has sold 2 @.@ 5 million copies worldwide

= = Singles = =

" Touch My Body " was released as the lead single from the album on February 12, 2008. The song received generally positive reviews from music critics, who complimented its hook and production, as well as its playful lyrics. " Touch My Body " reached the top position on the Hot 100 in its fourth week, and became Carey 's eighteenth chart topper, selling 286 @,@ 000 digital downloads. The song 's opening week broke several records, making her the solo artist with the most number one singles in United States history, surpassing the record held by Elvis Presley. Additionally, it gave Carey her 79th week atop the Hot 100, tying her with Presley as the artist with the most weeks at number one in the Billboard chart history . " The song also sold the highest amount of digital records in one week, surpassing Rihanna's "Umbrella" (2007), which sold 277 @,@ 000 units. Internationally, the song achieved strong chart success, peaking within the top five on the charts in Italy, Japan, New Zealand, Switzerland and the United Kingdom. The song's music video was directed by film @-@ maker Brett Ratner, who had previously worked with the singer on five other music videos. It follows around a story revolving around a computer employees fantasy as he visits Carey 's home . As he fixes her computer, he enters a fantasy in which the pair perform several activities together, including a pillow fight, playing laser tag, Guitar Hero and slot cars, and throw a frisbee, all while showing off Carey's figure in several revealing outfits.

"Bye Bye " was announced as the second single from the album on April 15 , 2008 . The song received generally positive reviews from music critics , and was heavily speculated to have become her 19th number @-@ one single on the Billboard Hot 100 . Many reviewers complimented its simple and understated musical arrangement and personalized lyrics , while some felt the song was too simple for an artist of Carey 's stature . The track only managed to reach a peak position of number nineteen on the Billboard Hot 100 . Throughout other countries where it found release , the song achieved relatively weak charting , peaking within the top ten in New Zealand , and in the top @-@ fifty in Canada , Ireland , Slovakia , and the United Kingdom . The song 's accompanying music video was directed by Justin Francis on the island of Antigua in the Caribbean . Notably , Carey and Cannon began dating during their trip to the island , and later wed on April 30 , 2008 . The video features behind @-@ the @-@ scenes footage of the couple , Carey promoting the album in the United Kingdom , as well as photos of several of Carey 's close friends , family and past collaborators such as Luciano Pavarotti and Luther Vandross .

The album 's third single , " I 'II Be Lovin ' U Long Time " , was released on June 1 , 2008 . Many complimented the song 's production and incorporation of the " Stay With me " sample , while others were unimpressed with the chorus in general . Chuck Taylor of Billboard assured the song would endure strong success and radio appeal , and complimented its overall production , as well as Carey 's voice : " [ It 's ] a playful , beach @-@ befitting groove , featuring a bright sample from DeBarge 's " Stay With Me , " lushly woven vocals and Carey 's highs doting on fans with her sonic signature . " In the United States , the song peaked at number fifty @-@ eight , and at number twenty @-@ seven in Japan . On the UK Singles Chart , " I' II Be Lovin ' U Long Time " peaked at number eighty @-@ four , and spent only one week in the chart . The song was featured on the final scene of You Don 't Mess with the Zohan ( 2008 ) , a film in which Carey made a cameo appearance . Its accompanying music video was shot over a three @-@ day interval in Hawaii , and makes usage of the islands scenery , as well as shots of Carey in several bikinis , while swimming with a dolphin .

" I Stay in Love " was released as the fourth and final single from the album on October 28, 2008. The song failed to chart on the Hot 100, though became Carey 's fourteenth chart topper on the Hot Dance Club Play . Additionally , it peaked at number ninety @-@ five on the UK Singles Chart . The song 's accompanying music video was filmed by Carey 's husband , Nick Cannon , and features Carey as a dancer in a Las Vegas show at the The Bellagio Hotel and Casino Resort . Additionally , during the show and its preparations , Carey realizes that her ex @-@ lover has found love with one of her fellow dancers , leading her to blow up the car he gave her , as well as its accompaniments in the Mojave Desert .

#### Other notable songs

Though not released as singles , three of the album 's songs managed to chart on Billboard 's Hot 100 and Hot R & B / Hip @-@ Hop Songs chart due to high sales . " Migrate " peaked at number ninety @-@ two on the Hot 100 , and ninety @-@ five on the R & B chart , while both " I 'm That Chick " and " Side Effects " peaked at numbers eighty @-@ two and ninety @-@ three on the Hot R & B / Hip @-@ Hop Songs chart .

### = = Promotion = =

Following the song 's digital release , Carey promoted the song on several live televised appearances and programs throughout the world . Only days prior to being released digitally , the singer was announced as the musical guest on an episode of Saturday Night Live , taking over for Janet Jackson who caught the flu and was unable to perform . Hosted by Jonah Hill , Carey performed both " Touch My Body " , as well as live rendition of " Migrate " alongside T @-@ Pain . Following the set , Carey and her manager at the time , Benny Medina , met with Lee Daniels , who then offered her a role in his film adaptation of Precious ( 2008 ) , in which Carey would later star and earn acclaim for her acting . After reaching the top of the Billboard charts , the Empire State Building was lit up in Carey 's motif colors , white , pink and lavender , for the entire week . On March 25 , 2008 , Carey was featured as the special guest performer at The Hills season premiere party , an event marking the start of a span of ten episodes airing in between season three and four

. Carey performed " Touch My Body " , " I 'm That Chick " and " We Belong Together " , before exiting the stage to a standing ovation . After the performance , Carey received strong praise from the program 's cast members , with Lauren Conrad saying " I 've always been a huge Mariah fan , and she 's just so beautiful and talented ' . Whitney Port and Audrina Patridge referred to Carey as " an amazing singer " , while claiming to have listened to her music from a young age . On April 12 , 2008 , Carey made an appearance on The Oprah Winfrey Show . Winfrey interviewed the singer on her weight loss ,  $\mathsf{E} = \mathsf{MC}^{\,2}$  , and even showed footage of Carey in her New York apartment , showing off her lingerie closet . Following the interview , Carey performed a live rendition of " Bye Bye " for the audience , with three background vocalists assisting her . Kevin Johnson from St. Louis Post @-@ Dispatch described the performance as " touching " , and complimented the song 's appeal .

On the seventh season of the talent competition American Idol , Carey was featured as a mentor for the top @-@ seven week . Titled " Mariah Carey Week " and airing live on April 14, 2008, the contestants were to perform a song from the singer 's catalog . After all seven contestants sang their individual songs, they all came together for a live rendition of Carey's 1996 collaboration with Boyz II Men, "One Sweet Day". Overall, critics noted how a Carey themed week would be extremely difficult for the performers, due to their vocally strenuous nature. Following their joint performance, Carey emerged onto the stage and performed "Bye Bye "live, while backed by a trio of supporting vocalists . Tamara Jones of The Washington Post jokingly commented on Carey 's flailing hand movements during the performance, writing how she was "waving like a malevolent homecoming queen " . Gil Kaufman from MTV News complimented Carey 's performance , commenting on her " barely there micro @-@ dress " and writing how she " serenaded the audience with her homage to lost ones . " The Calgary Sun 's Lindsey Ward described it as a " less @-@ than @-@ fab performance ", although complimenting on Carey 's leaner figure, " Oh, who am I kidding? She would look hot in a paper bag . " On April 25 , 2008 , Carey opened the Good Morning America " Summer Concert Series " with a live performance in Times Square . Carey , wearing a pink mini @-@ skirt, began the set with " Touch My Body " in front of thousands of fans. During the song, her backing vocals began to malfunction, causing it to repeat phrases and play during her main vocal moments. In order to let the sound engineer know of the problem, she substituted part of the lyrics for " stop singing my part now baby ", and completed the final chorus. She continued on with " I 'm That Chick ", and completed the three @-@ song set @-@ list with her follow @-@ up single " Bye Bye " . After marking the album 's stateside launch with her appearance on Good Morning America, Carey took to Europe to perform on several programs. She began with an interview on the British radio station, BBC Radio 1, and continued onto a live rendition of "Touch My Body" on both The Sunday Night Project and The Paul O 'Grady Show .

Similarly, Carey performed the song live on the German talent show, Deutschland sucht den Superstar ( Germany searches for the superstar ), in April 2008. On August 8, 2008, Carey performed a mash @-@ up of the song at the 2008 Teen Choice Awards. She began with her single at the time, "I'll Be Lovin' U Long Time", and worked into the bridge of "Touch My Body" before reverting to the former song. At the Fashion Rocks ceremony in 2009, Carey performed " Touch My Body " and her current single, " Obsessed ", as well as the remix to her 1995 song " Fantasy " . During the set @-@ list , Carey was accompanied by six men in black ties , who hoisted her into the air in front of over 6 @,@ 000 people during "Obsessed", and rigorous dance routines throughout " Touch My Body " . In promotion for E = MC 2 and the single , Carey was featured as a guest judge and musical act on the fifth season of the British talent competition, The X Factor. During that week, all the contestants would have to sing songs from Carey's catalog. Prior to her arrival, one of the show 's judges Dannii Minogue said " Could it get any more nerve @-@ wracking for the contestants? ", due to the general strenuous nature of Carey 's songs. After several performances by the finalists, Carey performed " I Stay in Love ", accompanied by three background vocalists. She received a standing ovation from the audience and judges, and continued backstage for a taped session with the contestants. At the end of the program, she performed her classic " Hero " (1993), and was eventually joined by the finalists for the finale of the song. "Hero was re @-@ recorded by the 2008 UK X Factor finalists and released as a single

, becoming the best @-@ selling single of 2008 . According to reports , the episode gained a large increase in viewers due to Carey 's presence , and was able to surpass its long @-@ time rival program , Strictly Come Dancing , in the ratings . Carey made an appearance at the American Music Awards , held on November 23 , 2008 at the Nokia Theatre . Wearing a long black gown , she performed the song after receiving an honorary award for her achievements in music . Chris Harris from MTV News described it as a " riveting performance " .

= = = Tour = = =

Since the album 's release in early April, Carey had said publicly that she planned on embarking on a large worldwide tour in support of  $E = MC^2$ . In an interview with Billboard on March 28, 2008, Carey explained " It 's come up, and I 'm probably going to do it, but I don 't know exactly how we 're going to do it or when . I 'm thinking probably September . But I think it 's important to tour with this album, because there are so many songs that I really want to sing live, that I really enjoy. " Months later, in an interview with MTV News in July, Carey further addressed her plans of a tour: " We 're looking at November right now . Please don 't hold me accountable if it turns out to be December 5 or December 7 or January 18! " When asked to describe the tour 's theme, Carey explained " I 'm thinking elaborate . I like elaborate . We only do substantial . That 's what my jeweler says . I haven 't gotten the looks in mind just yet , but we 're going to figure it out soon enough . " Despite continued plans for a tour , and announcements made on The X Factor in United Kingdom in November, the tour was suddenly cancelled by early December. Tabloids and critics began heavily speculating that Carey had become pregnant, and had abandoned plans for a tour as a result. Many claimed to have seen Carey visiting a famed gynecologist 's office in Los Angeles . Additionally, Carey 's newly slimmed figure began to change, as she stopped her exercise routines and gained weight. Though Carey had eventually announced that she was pregnant with twins on November 28, 2010, over two years later, she admitted she had indeed been pregnant during that time period, and suffered a miscarriage. For that reason, she cancelled the tour, and lost the child only two months later.

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= = Track listing = =
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= = Personnel = =

Credits for  $E = MC^2$  adapted from the album 's liner notes .

= = Charts and certifications = =

= = Release history = =